

Z
1009
M67
no. 1

BULLETIN OF THE UNIVERSITY OF MISSOURI

Library Series

Vol. I—No. 1

ANNUAL REPORT
OF THE
LIBRARIAN

1907



(Reprinted from the President's annual report to the Board of Curators,
1907-08, with an appendix.)

Columbia

ANNUAL REPORT OF THE LIBRARIAN 1907

BULLETIN OF THE UNIVERSITY OF MISSOURI

Library Series

Vol. I—No. 1

ANNUAL REPORT
OF THE
LIBRARIAN

1907



(Reprinted from the President's annual report to the Board of Curators,
1907-08, with an appendix.)

LIBRARY COMMITTEE.

C. A. Ellwood (College of Arts and Science),
C. M. Jackson (Department of Medicine),
R. H. Jesse (President of the University), Ex-Officio,
John D. Lawson (Department of Law),
W. G. Manly (College of Arts and Science), Secretary,
J. L. Meriam (Teachers College),
F. B. Mumford (College of Agriculture and Mechanic Arts),
H. O. Severance, Ex-Officio, Chairman,
H. B. Shaw (Department of Engineering),
O. M. Stewart (College of Arts and Science).

LIBRARY STAFF.

Henry Ormal Severance, A. M., Librarian.
Walter King Stone, A. B., First Assistant Librarian.
Grace Lefler, B. L. S., In charge of Catalogue.
Grace D. Phillips, B. L. S., In charge of Periodicals.
Bertha J. Bond, A. B., B. L. S., Cataloguer.
Clarence W. Sumner, In charge of night service.
Elizabeth Sinclair, B. L., Charging clerk.
Blanche Hedrick, Accession clerk.
Maude Higginbottom, Stenographer.

LIBRARIANS OF THE UNIVERSITY.

Robert S. Thomas, A. M., 1850-1853.
Bolivar S. Head, A. M., 1853-1860.
Edward T. Fristoe, A. M., 1860-1862.
Joseph Granville Norwood, A. M., M. D., 1862-1877.
Scott Hayes, M. S., M. Ag., 1877-1879.
Edwin J. Jolley, M. S., 1879-1880.
J. H. Drummond, A. B., A. M., 1881-1887.
John Watson Monser, 1887-1896.
Walter King Stone, A. B., 1896-1900.
James Thayer Gerould, A. B., 1900-1906.
Henry Ormal Severance, A. M., 1907—.

Z
1009
M67
no. 1

XV. THE UNIVERSITY LIBRARY.

To the President of the University of Missouri:

SIR: I have the honor to submit, herewith, my second annual report as librarian of the University of Missouri. The report really covers the work of the library under the first year of my administration, as I had been librarian only four months when the first report was made. The statistics are for the calendar year 1907, and include the libraries at Columbia.

Stack Room.

A year ago the condition of the book stacks of the library was anything but desirable. All the available space for books seemed to be utilized, all the shelves were either full or soon filled after my arrival. Furthermore the books were so scattered that it was impossible to render the public efficient service. The volume wanted might be in the stacks, in the librarian's office, in the south hall, in the north hall, in the periodical room, in the so-called "dark room" on the first floor, in the document room on the second floor, in the store room on the third floor, or in any one of the dozen branch libraries. Under these conditions it was impossible to serve a reader with expedition or with any degree of satisfaction. Furthermore the congestion in these various rooms was so great that it was impossible to get a desired book in a reasonable length of time. Books and pamphlets were literally stacked up in the various rooms from the librarian's office to the dark room on the third floor. My first request of the Executive Board, therefore, was that the basement room, the old gymnasium under the Reading room, should be fitted up for a stack room and that the books then scattered over the various rooms of Academic Hall should be brought together in one place. The request for the privilege of moving the stacks was granted at the July meeting but not the privilege of occupying the commodious room in the basement.

During the month of August the stacks were moved into the rooms south of the main corridor, formerly occupied by the offices. The catalog room, the librarian's office, the so-called "dark room" and the south hall were cleared and the rooms filled with book stacks. We were able to place in the stacks and in the adjoining rooms and in the Reading room practically all of our books that are in constant demand. Within two years other accommodations will have to be provided. The offices were transferred to the north corridor and the room formerly occupied by the periodicals.

In August the Executive Board authorized the relighting of the room into which the stacks were placed and some new fixtures for the south end of the Reading room where the stacks were formerly located. Hitherto the alcoves in the stacks were so poorly lighted that it became necessary either to take up the books from the lower shelves and carry them to the passage way and hold them up to the light to read the titles or to strike matches in the alcoves, which was a very dangerous proceeding. The new arrangement of lighting, however, is quite satisfactory. There are two drop lights with concave reflectors in each alcove. The south end of the Reading room is lighted by six clusters of four lights each with prism glass shades and reflectors. Each cluster is suspended from the ceiling by a chain about four feet in length.

The Board also authorized the construction of 106 linear feet of book shelves seven and one half feet high along the wall spaces of the Reading room and 68 linear feet of pigeon hole cases 6 feet high to be placed against the walls in the south end of the Reading room. The pigeon holes will accommodate 640 periodicals and the book shelves will carry between 5000 and 6000 volumes. The shelving was put in place early in September; the pigeon hole cases several months later. The cases and the shelving together cover practically the entire wall space of the Reading room.

Reference Collection.

The first problem that I undertook to solve on taking up my duties was to prevent the congestion of the students in the stacks back of the Delivery desk at the time of the movement of classes. Every student was allowed to go to any part of the stack room for any purpose at any time. The books that were reserved for class use were placed on the shelves just back of the Delivery desk. The congestion was caused by the students rushing into the library at the end of the recitation and trying to be first to get a book to which the professor had just referred the class. The solution of the problem was to move this class of books into the Reading room where students could reach them without the formality of writing out charging slips. The new cases built around the Reading room in August enabled us to make this change early in September. A majority of these books in constant demand were placed on the open shelves in the Reading room. Along with these were placed certain standard works together with strictly reference books and a majority of the sets of general periodicals indexed in Poole. These form the nucleus of the collection.

The reference library now contains about 5000 volumes, including the collection of indexes and the text-book library which are shelved near the catalog case by the east entrance to the room. A separate shelf list of this collection was made, duplicating the one in the cataloging room. It is placed on the end of the Delivery desk where it has been found very useful in locating books. Notwithstanding the fact that some of the books disappear temporarily from the shelves at examination time, there is no doubt of the success of the innovation. Where there is only one copy of a book to which a large class has been referred, the book is placed behind the delivery desk and issued by slip only. This change has been welcomed by the student body and by the faculty also. One indication of the appreciation of this new arrangement is the larger use that is being made of the library.

Reading Room.

The periodical room which was formerly kept open only seven and one-half hours per day has been turned into a work room for the catalogers. The current periodicals have been shelved in the south end of the Reading room in cases made especially for them. The assistant in charge of the periodicals has moved her desk to the south end of the Reading room in close proximity to the periodicals and is able to give considerable time to reference work. The periodicals are thrown by classes, the names of which are posted above the pigeon holes containing the magazines. Label holders have been secured for each pigeon hole and the labels containing the names of the periodicals are being printed for them. Large brass labels above the book shelves in the Reference collection indicate the location of the several classes of books. Name plates have been added to the several portraits hanging on the walls in the Reading room.

The large delivery desk separating the stacks from the Reading room has been reduced in length and squared around in front of the door leading into the new stack room. Gates have been placed at each end and only students who ask for the privilege are allowed to enter the stack room. The requests for stack room privileges are few, a fact showing that the books which a student really needs are on the reference shelves or can be had by applying at the desk. To be deprived of free and promiscuous use of the stacks has been no hardship to him. The stacks are kept in better shape than before, the books are more often and more easily found.

A new dictionary case made by the University carpenter has been placed in the center of the room and contains practically all the dictionaries in the library. The top of the case slopes each way from the middle, making a convenient rest on which to lay the books while consulting them.

An exhibition case stands in front of the Delivery desk. On this case are placed all new books just before they go to

the stacks. This gives the faculty and students an opportunity to see all the new additions before they are placed on the shelves in the stack room. Expressions of appreciation of this innovation have come to me from both students and faculty. The increase in attendance has necessitated additional chairs and tables. Three dozen chairs and two large Flemish oak tables have been added to the Reading room.

Upon my recommendation the Executive Board authorized the enclosing of the lower end of the west corridor to provide additional room for the library. The catalog cases will be located in this new room and some of the index books will be shelved here. It is hoped that the students will make use of this room for consultation purposes, thereby relieving the Reading room of considerable commotion.

The gentlemen's wardrobe which occupied the east wall of the Reading room, now occupies a place in this new room. This, however, is not adequate, neither is this arrangement desirable. The entire space allotted to the library is sorely needed for library purposes. Cloakroom accommodations should be provided elsewhere.

Inspection Books.

During the summer, arrangements were made with G. E. Stechert & Company, and with the Macmillan Company, whereby they send to the library at irregular intervals, all their publications for the inspection of the members of the Faculty. These books may be purchased by individuals or by the library. Those remaining unsold are returned to the publishers every three months.

This innovation has proved to be a boon to the Faculty. It gives them an opportunity to examine books in their lines of work before buying them or recommending them for purchase to the library.

Library of Congress Catalog.

In my last report a brief statement was made relative to the card catalog of the Library of Congress. The Manila proof sheets were received early in June and were cut into cards by the Stephens Publishing Company. There were upwards of 150,000 of them. They were thrown into a rough alphabet by several young lady students, for which the Executive Board appropriated \$175.00 from the student fund. The final alphabeting has not yet been completed.

Before the Library of Congress began printing these proof sheets about 50,000 cards were issued. In order to have our catalog contain all titles of books in the Library of Congress, steps were taken to secure these additional cards. Mr. Putnam, the Librarian of Congress, has acceded to my request and has authorized the sending of the cards spoken of above to this library gratis. When these cards have been received and alphabetted with those we now have our catalog of the Library of Congress will be complete. This catalog is an alphabetical list of all the books in this great collection containing one and one-half million volumes.

The catalog will facilitate the ordering and lessen the expense of the L. C. printed cards for our public catalog. These cards represent the best form and method in card making. Books may be borrowed from this library. This catalog, therefore, enables him to ascertain, without writing to Washington, whether the book wanted is there.

Budget.

The division of funds for the biennial period 1907-08, as recommended by the librarian and passed by the Executive Board, was made on the same basis as that of the previous biennial period. This distribution is not wholly satisfactory. It is hoped that a larger appropriation may be secured from the General Assembly in 1909 so that every department may be enabled to secure all the books needed for its work. The

following letter to the Executive Board shows the distribution of funds as estimated for 1907-08. Later in the year the Executive Board apportioned \$50 for books for the Debating team, \$50 for the Department of Physical training and \$75 for Journalism besides several appropriations for special purposes:

Columbia, Mo., April 5, 1907.

*To the Executive Board,
University of Missouri,
Columbia, Mo.*

Gentlemen:

I beg to submit the following report on the division of the Library funds for the two years, 1907 and 1908.

Income.

The estimated income of the libraries for the biennial period is as follows:

From the Collateral Inheritance Tax	\$ 18,000.00
From fees based on the income for 1905-6.....	
From Academic department	6,055.00
From A. & M. College	1,643.00
College of Medicine	1,490.00
College of Engineering	2,850.00
College of Law	4,540.00
College of Law, special appropriation	5,000.00
Teachers College	725.00
	<hr/>
	\$40,303.00

The cost of maintenance of the library, the equipment and the appropriation for Mr. Switzler's History of the University of Missouri should be shared by all departments alike. The binding of periodicals and the repair of books, subscriptions to periodicals, and the purchase of reference books should be borne by all the departments.

I would therefore recommend that the income from the Collateral inheritance tax be applied to provide for the main-

tenance and other objects as stated above and the amount of the fund not used for this purpose be left for expenditure at the discretion of the Board, for salaries, clerical help, the purchase of sets of scientific periodicals and transactions of learned societies, etc.

The amount to be provided for is as follows:

Salaries	\$ 7,500.00
Equipment and Supplies	800.00
Switzler's History	800.00
Bindings	3,000.00
Subscriptions to Periodicals	4,000.00
Reference Books	500.00
	<hr/>
	\$16,600.00

According to the estimate of Mr. Gerould 17 per cent of the work of the Medical course, 30 per cent of the work of the Agricultural course, 33 per cent of the work of the Engineering course, and 50 per cent of the work in the Teachers College are given by men whose departments are reckoned as academic. Consequently, in the allotment of funds a certain per cent of the fees of each of these departments should be placed at the disposal of the Academic Department, or of the men who are in two departments. I would, therefore, suggest that 10 per cent of the Medical, 20 per cent of the Agricultural, 20 per cent of the Engineering, and 20 per cent of the Teachers College funds be added to the Academic funds. Making the computations accordingly the results are as follows:

Academic department	\$ 7,247.60
A. & M. College	1,315.40
College of Medicine	1,341.00
College of Engineering	2,280.00
Teachers College	580.00
College of Law	9,540.00

If the fees in any of the departments exceed the amount estimated, they can be reapportioned on the same basis.

I would recommend that the amount to be received from fees, based on the income for 1905-06 be apportioned in a lump sum to each department, except the Academic to be apportioned by the Dean and Faculty of each department.

I would recommend the following division for the Academic funds: \$500 to History; \$400 to English; \$300 to each of the following: Archaeology, Astronomy, Botany, Chemistry, Economics, General list, Geology, German, Greek, Latin, Mathematics, Philosophy, Physics, Political Science, Romance Languages, Sociology, Zoology; \$200 each to Current Literature, Psychology, Religious books; \$100 each to Bibliography, Elo- cution, Free-hand Drawing, President's list.

Very truly yours,

Librarian.

The following table shows the expenditures of the library for 1907, exclusive of the Law library, which has a separate account:

RECEIPTS.

Cash on hand January 1, 1907	\$ 4,938.47
Fees	7,404.55
Inheritance Tax	9,000.00
Total	\$21,343.02

EXPENDITURES.

Salaries and help	\$ 4,978.05
Switzler's History	400.00
Equipment and supplies	364.55
Binding and repairs	1,195.38
Periodicals	2,441.06
Books	7,909.64
Total	\$17,388.64
Cash on hand January 1, 1908	3,954.38

\$21,343.02

ACCESSIONS.

Total number of volumes in all the libraries at Columbia, December 31, 1907		81,563
Pamphlets not accessioned (estimated)		20,000
Total		101,563

During the year there were added to the various libraries of the University, at Columbia, 9013 volumes, distributed as follows:

General library	5,696
Agricultural library	263
Engineering library	392
Law library	1,699
Medical library	632
Lathrop library	331
Total additions	9,013

The total number of periodicals currently received is 1054, of which 523 are gifts and 531 were received through subscription.

The number of accessions for 1907 exceeds the number for any one year in the history of the library except the year 1903-4, when the Senator Vest collection of documents was accessioned. The number this year is a normal growth. There were no large gifts presented, although a considerable number of volumes had accumulated, waiting to be recorded.

Of the accessions to the General library 1595 were received as gifts or in exchange. Of the accessions to the Agricultural library 199 volumes were gifts. There were also gifts of 41 volumes to Engineering library and 33 volumes to the Law library. The Medical library received by gift and exchange 264 volumes.

The number of volumes added as the result of binding periodicals during the year was 1028.

The important purchases during the year includes several sets of reference works, and several sets of periodicals, and the transactions and proceedings of scientific and literary societies as follows:

Hastings, Dictionary of the Bible, 5 vols.	\$ 25.00
Historians history of the world, 25 vols.	50.00
Jewish Encyclopedia, 12 vols.	75.00
McCarthy, Irish Literature, 10 vols.	15.00
Moulton, Library of literary criticism, 8 vols.	25.00
Deutsche litteratur denkmaler des 18 u. 19 Jahrhundert, 135 vols. bound in 15 vols.	40.75
Goethe—Jahrbuch, 26 vols.	42.50
Heyse, Paul, Gesammelte werke, 31 vols.	29.75
Jahresbericht der Germanischen philologie, 25 vols.	56.22
Jahresberichte fur neuere-deutsche litteraturgeschichte, 10 vols.	68.00
British Assc. for the advancement of science, Reports, 73 vols.	70.00
Nature (to complete set) 42 vols.	40.00
Notes and queries, 121 vols.	196.70
Physical society of London, Proceedings, 17 vols.	52.50
Royal society of London, Philosophical transactions, 1860- 1886, Section A 1887-1900	214.00
Deutsche Shakespeare gesellschaft, Jahrbuch, 42 vols.	87.00
Munich K. b. Akademie der wissenschaft. Sitzungsberichte der philosoph-philologisch. Historisch. Klasse 1860-1901, 43 vols.	50.00

The total number of volumes received as gifts or as exchanges during the year were 2132 volumes and 2151 pamphlets. These represent a large number of donors, but those who have given any considerable number are few. One of the most valuable gifts of the year was made by the French government through the Minister of Public Instruction. The nature of the gift is indicated by the following letter:

July 12, 1907.

The Executive Board,
University of Missouri.

Gentlemen:

I beg to advise you of the gift of the following works which have been presented to our library, through the solicitation of President Jesse, by the Minister of Public Instruction and Beaux-Arts, France:

First, Collections de documents inédité sur l'histoire de France.

Second, Inventaire général des richesses d'art de la France.

Third, Catalogue général des livres imprimés de la Bibliothèque Nationale.

The first set is a very valuable one for historical research. It is still in the course of publication, although sixty-two volumes have already been printed. The second work is important to lovers of art. Twenty volumes have already appeared. This work is also continuous, a volume or more being published each year. The last work is one of the great bibliographical undertakings of the twentieth century. Twenty-eight volumes have already been published and two or more volumes per year may be expected for the next fifteen or twenty years.

Respectfully,

Librarian.

Dr. Graves, on leaving the University, presented a collection of 166 volumes, mostly text-books in the Greek and Latin languages. The Honorable D. H. Shackelford sent the library several hundred volumes of government documents.

The following is a list of donors who have given twelve volumes and pamphlets or more to the library during 1907.

	Vol.	Pam.
Alexander, Carter	1	11
Brockhaus, F. A.		19
Canada geological survey		53
Heath, D. C. & Company	13	9
Iowa, Secretary of State	1	20
Iowa State Library Commission	1	12
Jesse, R. H.	2	42

Library of Congress	9	3
Manly, W. G.	1	16
Massachusetts, School for the Feeble-minded		22
Michigan Agricultural College	25	102
Michigan Dairy and Food Commission	2	108
Michigan, Supt. Public Instruction	20	1
Michigan State Treasurer	2	30
Myer, Max W.	4	11
New York City. Charity Organization Society		66
New York. State Board of Charities	47	
North Carolina. Geological Survey		25
Ohio. Board of State Charities		26
Ohio. State Reformatory		15
Stone, Senator Wm. J.	21	
Westinghouse Manufacturing Company		32
United States. Superintendent of Documents	44	11

Our duplicate room remains untouched as regards a list of the books, pamphlets and periodicals contained therein. It has therefore been impossible to arrange an extended exchange of duplicate books. The exchange of publications, however, has been gratifying. Included among these are the following institutions with the number of volumes and pamphlets donated by each:

	Vol.	Pam.
Breslau, Konigl. u. Universitäts-Bibliothek		25
Chicago. University		37
Colorado College		17
Colorado. State Library	1	19
Connecticut. State Library	12	9
Giessen, Universitäts Bibliothek		51
Gottingen, Universitäts-Bibliothek	1	154
Jena, Universitäts-Bibliothek		196
Johns Hopkins University		26
Marburg, Königliche Universitäts-Bibliothek		105
Michigan. University. Library		31
Montana Historical Library	7	16

New York State Library	16	16
Pennsylvania. University. Library	3	13
Rio de Janeiro, Bibliothèque Nationale		10
Rostock, Universitäts Bibliothek		88
Strassburg Universitäts & landes-Bibliothek		18
Toronto. University	1	15
Wurtzburg, Universitäts Bibliothek		110

The John H. Lathrop Memorial Library.

This collection of books was made possible through the generous gift of \$1,000 of the Honorable Gardiner Lathrop, President of the Board of Curators. Two installments of \$250 each have already been received, the first on May 14, 1906, the second on April 12, 1907. There have been expended on this fund to date \$483.52 and the total number of volumes purchased is 674. The collection is shelved in the office of Dr. E. A. Allen and consists of works in English and American literature.

The Catalog.

The total number of cards added to the catalog during the year is 14,007 of which 5,870 were Library of Congress printed cards, and 8,137 were typewritten. These represented 2,501 titles and 3,533 volumes. There were 5,882 volumes added to the cards already in the catalog, making a total number of 9,415 volumes cataloged during the year.

With few exceptions the pamphlets which have accumulated during the year have not been cataloged. It has been impossible to do anything with them as the entire time of the force had to be given to the preparation of the bound volumes for the shelves. The number of volumes cataloged is more than double the number cataloged the year preceding.

Circulation.

It is gratifying to note the increased use that is being made of the library. There is a larger number of readers than ever before and the number of books used exceeds that of any previous year.

Under the new regulations which went into effect in September, the library has been open twelve and one-half hours per day—7:55 A. M. to 5:30 P. M., and from 7 to 10 P. M. Sunday 2 to 5 P. M. During the year the Reading room has been closed only five days—New Year's day, Fourth of July, Thanksgiving day, Christmas day and one day for cleaning.

Unfortunately, for statistical purposes, no record has been kept of the number of volumes used by readers. The reader's slip is handed back to him on the return of the book borrowed. This arrangement was varied for three consecutive days and the result showed an average of 626 volumes per day borrowed at the desk. Since the establishment of the Reference collection, the number of volumes drawn at the desk represents not more than half of the circulation as a considerable number of the books in constant use are shelved in the Reading room where they can be used without the formality of a charging slip. The circulation, therefore, in the General library amounts to about 1,000 volumes per day.

Furthermore the number of readers constantly using the library is some indication of the service the library is rendering. The average daily attendance for September, October, November and December, taking the count at 10 A. M. and 8 P. M. is 87. The highest number in the Reading room during the day at the 10 o'clock count was 170 and at 8 P. M. 112. This is an increase of 50 per cent in attendance over last year. The Sunday attendance has more than doubled.

An effort was made in May to have all the books drawn out on personal accounts returned to the library. It was found that a large number of volumes had been drawn out five or six years ago by members of the teaching force and had never

been returned to the library. Many of the volumes returned had been "lost books" as no charge was on record against the borrower. In several cases the books charged could not be accounted for by the borrower. The records, however, were finally cleared up. With the new rule that all books must be returned before Commencement day each year, little difficulty along this line is anticipated.

It is interesting to note to what extent the borrowing had gone. One professor had in his possession 220 volumes, another 175 volumes, a third 116 volumes and others a smaller number varying from one to 100 volumes.

The library has been able to supplement its collection through the kindness of other libraries. Thanks are due to the following libraries for the loan of the number of volumes set opposite their names:

University of Chicago	16
Columbia University	7
Harvard University	12
University of Kansas	2
University of Michigan	17
Missouri Botanical Garden	4
United States Surgeon General's Office	83
United States Department of Agriculture	2
Yale University	6

Total 149

This library has been of service in loaning books to non-resident students doing graduate work, to private citizens and to institutions as follows:

	Vols.
Helen F. Bridges	2
University of Minnesota	1
Mr. B. M. Anderson, Jr.	2
Mr. Ernest F. Bush	2
Mr. J. G. W. Fischer	1

Missouri School of Mines	5
Miss Nell Jasper	2
Miss Emma McWilliams	2
Professor J. W. Million	1
Warrensburg State Normal	1
Mr. A. S. Chessin	1
Mr. Rush C. Lake	1
<hr/>	
Total	21

Binding Report.

The number of volumes bound last year in the several styles of binding is indicated by the following:

No. of volumes bound in cloth	362
No. of volumes bound in duck & buckram	602
No. of volumes bound in Morocco, roan, Russia, cow- hide, etc.	1175
Resews, old cases, etc.	42
<hr/>	
Total number of volumes bound	2181

Of this number 1,028 were the result of binding periodicals. The total cost of binding for the year was \$1,195.38.

Departmental Libraries.

There has been several changes in the administration of the departmental libraries. All the catalog cards for books in these libraries are being marked with the name of the departmental library where the book is shelved. Hitherto all books except those in the Law library were cataloged for the General library and then charged out to the department. This created no end of confusion, as the book clerk would look on the shelves first, then search the charging tray to locate the book. All this trouble will be obviated as soon as the catalogers can get the cards changed.

The users of these branch libraries have been at a disadvantage as there has never been a separate catalog or index or printed list of the books in any department. When a collection, isolated from the General library, reaches 2,000 volumes, there should be a card index or a dictionary catalog for use in the room where the collection is located. It would also be an advantage to have related subjects cataloged in the same file. To illustrate, many of the books shelved in the Zoological laboratory are wanted for reference in the medical library. If the investigator in human anatomy has an index at hand showing him where books on related subjects are shelved, it would save much time and place the material in his reach.

The work has been begun. A card index arranged by subjects has been placed in the Engineering library. The work will be pushed forward as fast as we can get help to do it.

In October the librarian, with the consent and co-operation of the Department of Chemistry, opened the Chemical library for the use of faculty and students. There is no one in attendance while the room is open. This collection is shelved in the tower of the Chemical building, reached by three flights of stairs. Hitherto, the books were under lock and key. If a student wished to consult a chemical dictionary, or read a description of an experiment that he was performing, he would need to search the building for a professor or the janitor, borrow his key, ascend to the tower room, consult the dictionary or read his article, descend and return the key. The inevitable result was that the books were little used. They were practically inaccessible. Throwing the room open to students does not obviate the whole difficulty. The library is too far from the laboratory. A room on the first or the second floor should be fitted up for the library with ampler accommodations.

One other library, the Geological collection, is without attendants, but it is open practically all day. There was no loss of books from this collection last year.

The Zoological collection of books has been moved out of Dr. Lefevre's office into a room fitted up especially for the purpose. It now assumes a different aspect. It is a library for the department and not merely for the professor in charge of the department. This library is open most of the day and a large number of evenings. Whenever any member of the teaching force is present the library is accessible.

Several departmental libraries are in charge of the stenographers for the respective departments. On the whole the arrangement is more satisfactory than those in charge of students. Such libraries are the Agricultural, the Experiment Station, the Horticultural and the Dairy libraries. These libraries are open during the day while the stenographers are on duty.

The departmental libraries were all checked up in June with the charges against them. In all the branch libraries there were 313 volumes that could not be accounted for, which were in those libraries the year previous. The first inference might be that those collections unguarded and those under supervision of students would show the greater loss. This is only true in part. The Engineering library and the Medical library, under student supervision, lost 76 volumes and 46 volumes respectively, while the Agricultural library and the Horticultural library, under much stricter supervision, lost 81 volumes and 16 volumes respectively. It might be said, in justice to the Agricultural library, that the collection was not checked a year ago and that only a part of the books were under any supervision before that time.

There were sixty volumes of Chemical books unaccounted for and this library was under lock and key. The books in the Geological laboratory and in the Romance Seminary, with no assistant in charge, and with very little supervision, lost only 4 volumes and 12 volumes respectively. It is very evident from the foregoing that the fault is partly in the system and

that members of the faculty as well as members of the student body, borrow books without leaving a record and that they forget to return them.

The Agricultural Libraries.

The books belonging to the College of Agriculture are very much scattered. The main library is in the Agricultural building and contains about 2,000 volumes. This library is cared for by the stenographer to the department of Animal Husbandry. The library is open seven and one-half hours per day—8 to 12:30 and 2 to 5.

The number of periodicals currently received in this library is 124.

This library has been increased by 263 volumes during the year of which 199 were gifts. A large number of herd books have been added, many of which were gifts. Among such gifts might be mentioned that of the American Poland-China Record, 51 volumes, presented by the American Poland-China Record Association.

The other collections belonging to the College of Agriculture are shelved, some in the Horticultural building, some in the Live Stock building, and others in the Dairy building.

The fund apportioned in a lump sum to the College of Agriculture for library purposes for the biennial period was \$1,315.40. One-half of this amount, together with an unexpended balance was distributed among the several departments for the year 1907-08, as follows:

Agricultural Chemistry	\$ 180.00
Agronomy	50.00
Animal Husbandry	175.00
Botany	150.00
Dairy	60.00
Dean's list	45.00
Home Economics	50.00
Horticulture	75.00
Veterinary	50.00

Engineering Library.

Open from 9—12, 2—4:30, 7—10; 8½ hours daily.

Number of volumes added during the year.

By purchase	351
By gift	41

Total 392

Total number of volumes in the library, Dec. 31, 1907....2028

Number of periodicals currently received is 40

The engineering library has been open an hour and a half per day longer than it was during the preceding year. This seemed necessary to meet the demands of the readers. The library has been under the immediate charge of four students: A. H. Reese, A. V. Elston, Goodman Bell, and R. I. Johnson. The responsibility has been divided among the four. While this has worked quite satisfactorily it is not the ideal arrangement.

The purchases for the year are not large owing to the lateness in the year when the orders reached the librarian. They will help to swell the total for 1908.

The funds apportioned in a lump sum to the College of Engineering for library purposes for the biennial period 1907-08 was \$2,280.00. On recommendation of the Engineering Faculty this amount was distributed among the departments as follows:

Civil Engineering	\$ 660.00
Electrical Engineering	660.00
Mechanical Engineering	660.00
Shop Work	100.00
Drawing	100.00
Mechanics	100.00

Hitherto this library has been strictly a reference collection, as far as the student is concerned, but with the beginning

of the present college year the privilege of borrowing books for over-night use has been granted.

A new catalog case for cards has been placed in the library containing a shelf list of all the books belonging to the collection. It is hoped that a card index alphabetical by authors and titles may be added later.

The capacity of this library room is limited. The remainder of the wall spaces are to be covered with book cases immediately. With the present rate of increase this room will not accommodate the library for more than a year.

Some of the important purchases during the year are the following:

Engineering (London), 31 vols.	\$ 75.00
Electrician (London), 45 vols.	150.00
Engineer's Club, Philadelphia, 23 vols.	24.00
Electrical World, vol. 5 to 18	37.50
N. E. Water Works Assc., Journal, 18 vols.	30.00

Medical Library.

Open 8—12, 2—5:30; 7½ hours.

Number of volumes added during 1907:

By purchase	368
By gift	264

It is in the immediate charge of a student, Mr. R. E. Talbert,

Total	632
-------------	-----

Total number of volumes in the library Dec. 31, 1907...2993

The number of periodicals currently received for the department is 67.

This library is now open seven and one-half hours per day. who has taken a very great interest in the library and consequently has kept it in a very satisfactory condition.

The library, during the year, has had a very satisfactory growth. Several of the periodical sets which are indispensable

to investigation in medicine have been added. The Centralblatt für Bakteriologie is now complete with the purchase during the year of the first 26 volumes at an expense of \$98.50. The Journal of Pathology, 11 volumes, has also been added at a cost of \$72.50. So also the Journal of Hygiene, 6 volumes at \$44.10.

Of the 264 volumes received by gift and exchange 262 came from the Library of the University of Michigan in exchange for duplicate material, such as state executive documents, which have been sent and will be sent from our duplicate collection.

The shelving space is nearly exhausted. The library room will hardly accommodate the additions for 1908.

Law Library.

Open 8—12:30, 2—5, 7—9; 9½ hours daily.

Number of volumes added during the year	1699
Total number of volumes in the library Dec. 31, 1907..	13313
The number of periodicals currently received	16

The Law library is assuming large proportions. The room formerly occupied as a cloak room has been fitted up with book cases and the text book portion of the library shelved therein. Students no longer have unrestricted use of this collection. Owing to the large number of books lost under the old system, it was decided to issue all books in the nature of textbooks on call slips and to insist that the books should not be taken from the building except for over-night use. The new arrangement is working very satisfactorily. This room serves as the librarian's office. The accessioning, cataloging and the clerical work is all done here.

Owing to the large number of additions to this library and the inconvenience of having all the books go to the General Library to be prepared for the shelves, it was decided to give this library half of the time of a cataloger. Miss Bertha Bond, of the General Library, was detailed for this work,

one-half of her salary to be paid by the Law library. She has taken charge of this library from 8 A. M. to 12:30 P. M. since the department opened in September. The results of this arrangement have been very satisfactory. The books are prepared for the shelves more expeditiously and the students have a trained librarian to assist them in their reference work. The accessions for 1907 are more than twice as many as they were in 1906, and the indications are that the increase is normal and will continue at the same rate in future years.

This collection is the largest on the Campus outside of the General Library. The income for this library is one-fourth of the income for all the libraries on the Campus. The income is practically \$5,000 per year. The full time of one assistant should be given to this work.

The library has been open nine and one-half hours daily except Sunday, during the college year. It has been under the immediate charge of Miss Bertha Bond who divides her time between the General Library and the Law library, and four students of law, J. E. Price, W. B. Bostian, W. W. Wright and Herbert Peck.

The transfer of the cataloging to the Law library has necessitated some new equipment in the way of a desk and chair for the librarian in charge, a new perforating stamp, new book plates and the like.

One of the purchases of last year is worthy of special mention. The New York Life Insurance Company offered their law library at Montreal for sale. Among other works this library contained a complete file of the Irish and Scotch reports—the reports of all the courts. The Boston Book Company purchased the entire library at a low figure and sold to the Law library of the University of Missouri, these two sets, containing 741 volumes, at the very reasonable price of \$2,000.00.

The Staff.

In my last report your attention was called to the fact that the library staff was inadequate for the demands being made upon the library. During the year two assistants on full time have been added to the staff. The work which had accumulated before 1907 together with the new lines of work opened up during the year have demanded more time than the staff has been able to give to it.

At a meeting of the Executive Board on June 29th Miss Bertha J. Bond, of the University of Illinois, was appointed to the position of Cataloger in the General Library. Her time is divided between the General Library and the Law library and the salary is shared by both. The Law library has become so large and the additions so numerous that it became necessary to give at least half of the time of one assistant to the cataloging of the law accessions. Besides this work, she has full charge of the Law library from 8—12:30 daily.

On April 10th the Executive Board authorized the employment of a man assistant who should, among other duties, have charge of the night service and take the place of the night librarian after September 1st. It was impossible to secure a competent assistant at the salary offered. When the University opened in September the night service was very much crippled owing to the lack of sufficient capable help. The experiment of student help alone for the evening service was tried but was not satisfactory. The inexperience of the young men and the lack of acquaintance with the work rendered the service inefficient. Then, too, the work became so heavy that one person could not take care of it. Two students instead of one were then employed for the night service but still the demands for an assistant with a wider knowledge of books and able to assist students in their reference work were persistent. To meet this demand two of the young ladies of the staff were detailed for night work at the desk two nights a week each, to assist the student book clerk.

In the meantime the State Historical Society asked co-operation in cataloging the books in their library. It was finally decided to secure a young man who would be competent to take charge of the night service and to assist in cataloging the State Historical Society's library. Mr. Clarence W. Sumner of Earlham College was appointed an assistant for this purpose. He entered upon his duties January 2, 1908.

In addition to the work of the staff it has been necessary to secure certain clerical help and to employ three students a few hours per week. These students are:

Miss Alma Turner, who assists in the catalog department; E. L. Burge and B. E. Cowherd, assistants at the Delivery desk.

New Library Building.

The University has outgrown Academic Hall. Lecture rooms, class rooms and offices are badly needed. Rooms on the fourth floor and rooms in the basement have been fitted up for temporary use. There is no more available space. The quarters occupied by the General library and by the State Historical Society are badly needed for offices and lecture rooms. With the large increase in the number of students enrolled in the University some provision must be made for their accommodation.

The Library has outgrown the quarters assigned to it. Our Reading room, although it is one-third larger than it was last year, is already taxed to its full capacity. The stack room will barely hold the additions for another year. The room is now comfortably filled. The crowded condition of the Document room and the Duplicate room remains the same. All the college documents are shelved in the Duplicate room. There will be no alternative but to cord the books up on the floors and halls unless some additional room should be secured. The floor space allotted to the library for Reading room and stacks is no more than the space given to the Art

Museum or to the girls gymnasium and parlors. The University library could utilize twice the space it already has and have no floor room to spare. The library needs a larger reading room which can be secured only by securing a new building. The books which the library already possesses would fill a stack room with a floor space of 40x80 feet. With a good large stack room our books could be made available and more useful. A new building would provide seminary rooms so that the small collections so badly scattered could be brought together. A seminary room for advanced students of the languages and another for those in historical, economical, political and social sciences are badly needed.

The present day methods of teaching are much different than those in vogue five or ten years ago. The laboratory method now prevails. No student would expect to do creditable work in zoology or chemistry without apparatus. Even so the student of literature and history cannot expect to do creditable work in any of those branches without the necessary books at hand. They are his tools. Now that the University of Missouri has been admitted to the Association of American universities, some provision must be made for a strong graduate school as this provision is one of the conditions of entrance into the association. It is practically impossible to do graduate work without an adequate room well supplied with books on special lines. A new building would supply the University with suitable seminary rooms in close proximity to the stacks.

Again, we need a new fire proof book vault to insure our valuable collection against loss by fire. Our books are worth upwards of \$150,000 and to allow them to be exposed is not wise. Every year we are adding a number of valuable sets. These are becoming scarcer every year. Many sets of periodicals which are much needed for our work are already out of print.

Respectfully submitted,

HENRY O. SEVERANCE, Librarian.

EXTENSION OF LIBRARY PRIVILEGES.

The Executive Board at its meeting on February 27, 1908, passed the following resolution:

"That the privilege of borrowing books from the library of the University be extended in the discretion of the librarian, to other institutions of the state, to clubs and organizations, to graduates and to former students of the University, and to other responsible private citizens of the state, under the regulations now in force governing the use of the library by students, provided that the borrower pay the cost of transportation."

Any citizen of Missouri wishing to avail himself of this privilege should address the Librarian, University of Missouri, Columbia, Missouri.

APPENDIX.

LIST OF SCIENTIFIC SERIALS IN THE LIBRARIES OF THE UNIVERSITY OF MISSOURI.

INCLUDING

GENERAL SCIENCE, MATHEMATICS, ASTRONOMY, PHYSICS,
CHEMISTRY, GEOLOGY, BIOLOGY, BOTANY,
ZOOLOGY, AND MEDICINE.

The letters following the title indicates the library where the set is shelved, as:

- | | |
|------------------------------|--------------------------------|
| Ag. Agricultural library. | H. Horticultural library. |
| C. Chemical library. | M. Medical library. |
| D. Dairy. | Obs. Astronomical observatory. |
| Exp. Sta. Experiment Station | V. Veterinary library. |
| library. | Z. Zoological library. |
| G. Geological library. | |

A plus sign (+) indicates that the serial is currently received and that the set is complete from the last volume number given.

Parallels (||) indicate that publication ceased with the preceding date or volume.

The sets are in the General library unless otherwise indicated.

- Abaddia. Observatoire. Observations an cercle méridien, 1+ Obs.
 Academia nacional de ciencias de la Republica Argentina. Cordoba.
 Boletin, 17^a, 18^a, 1903, 1905
 Academia polytechnica do Porto. Annaes scientificas,
 v. 1¹⁻⁴, 2¹⁻³, 1905+
 Academia de ciencias medicas fisicas y naturalis, Havana. Annales,
 v. 37, Apr.-May, 38+
 Académie de Stanislas. Mémoires, 1854, 1862, 1865
 Académie impériale des sciences de St. Petersburg, Bulletin,
 Sér. 5, 14+
 Académie impériale des sciences de St. Petersburg, Travaux du
 musée géologique Pierre le grand prés 1+ 1907+
 Académie royale de sciences, des lettres et des beaux-arts de Bel-
 gique. Bulletin, sér. 2, 38-41, 72-73
 — Annuaire, 1906+
 Academy of natural sciences of Philadelphia. Proceedings, 54-56
 Academy of sciences, St. Louis. Transactions, 1-16 1876+
 Accademia dei Lincei, see Reale accademia dei Lincei.
 Acta Mathematica, 1+ 1882+
 Ala. Geological survey. Bulletin, 4-9
 — Report, 1874-76, 1890, 1900-1901
 Alabama industrial & scientific society. Proceedings,
 2, 4^a, 1892, 1894
 Algiers. Observatoire. Catalogue photographique. Introduction
 and 5^a, 6^a, 7^a. Obs.
 Allegheny observatory. Miscellaneous sci. papers, n. s. 1+ Obs.
 Amer. acad. of arts & science. Proceedings, 37+ 1901+
 — Memoirs, 2 pt. 1, 1893, 12^a+ 1898+
 American academy of medicine. Bulletin, 2-3 1895-9 M
 Amer. assc. for the advancement of science. Proceedings,
 1, 13, 18-20, 22+ 1848+
 American chemical journal, 1+ 1879+ C
 Amer. entomological society. (Contin. of entomological society of
 Phila.) Transactions, 4+ Sup. 1v. 1872+ H
 Amer. ephemerides and nautical almanac, see U. S. nautical almanac
 office.
 Amer. geologist, 1-36, 1888-1904
 (Contin. in Economic geology.) G

American gynecology,	1-3. 1902-3	M
Amer. homoeopathic ophthalmological, otological & laryngological society. Transactions,	13-14. 1900-01	M
Amer. journal of anatomy,	1+ 1901+	M
Amer. journal of mathematics,	7+ 1885+	
The American journal of medical sciences,		
1-9, 12-15, 17; new series, 15-16, 19-22, 30-44, 55-76, 94, 97, 98, 100-103, 105-107, 116, 121-130, 132.		M.
American journal of microscopy,	1-6 1875-1881 .	
American journal of nursing	3-4. 7+ 1902+	M
American journal of obstetrics,	9-36, 40-42, 44+	1876+ M
American journal of physiology,	1-14, 16+	1898+ M
American journal of science,	51+	1846+
American lancet,	N. S. 10-17, 1886-1893	M
American mathematical society. Bulletin,	1+ 1894+	
(Contin. of N. Y. math. society.)		
American mathematical society. Transactions,	1+ 1894+	
American medical association. Journal,	5-16, 40+	1885+ M
— Transactions,	2, 6, 24-33	1849+ M
American medicine,	2-4 1901-2	M
Amer. medico-psychological association. Transactions,	7-8, 1900-01	
American meteorological journal,	9. 1892-3	G
American microscopical society. Transactions,		
1-17, 20, 1878-1895, 1898		
(Cont. of Amer. Society of Microscopists.)		
Amer. monthly microscopical journal,	1-15, 22-23, 1880-98, 1901-02	
Amer. museum of natural history. Bulletin,	2-14 1887+	
— Report,	1881, 1886-89, 1895-1901	
Amer. naturalist,	1-7, 16-17 ¹⁻¹⁰ , 20 ³ , ¹⁰ , 26-40	1867+
American ophthalmological society. Transactions,	3-9 1880-1902	M
American otological society. Transactions,	1-7 1868-1901	M
American pharmaceutical association. Proceedings,		
12, 26, 28, 37, 38, 1864+		
Amer. philosophical society. Proceedings,	8-36, 39+	1861+
Amer. physical society. Bulletin,		1-3 ¹
American public health association,	11. 1885	
American quarterly microscopical journal,	1 1878-79	
American quarterly of Roentgenology,	1+ 1907+	

- American veterinary review, 2-15 1878-91 V
 American year-book of medicine & surgery, 1900 M
 Ames botanical lab. Contributions, 1-4, 6
 Analyst, 26+ 1901+ C
 Anatomische gesellschaft. Verhandlungen
 1+ 1887+ (v. 1, 2, 4, 9-12 in Anat. anzeiger). M
 Anatomische hefte, Abt. I, Beiträge u. referate zur anatomie,
 27+ 1905+ M
 — II, Ergebnisse der anatomie und entwickelungs geschichte,
 1+ 1892+ Z
 Anatomischer anzeiger, 1+ 1886+ Ergz. 1-3, 5-9. M
 Annalen der chemie, see, Liebig's Annalen der chemie und der
 pharmacie.
 Annalen der physik (Wiedmann),
 77-134, 173-75, 218-20, 226, 237+ 1824+
 Annalen der physik. Beiblatter, 1+ 1877+
 ——— Ergzbd., 1-4, 6 1843-74
 Annalen der physik und chemie, see, Annalen der physik.
 Annales de chimie et de physique,
 Sér. 2, 1-59, 61-75; Sér. 3, 1-69; Sér. 4, 1-3, 7-9; Sér. 5, 7-9;
 Sér. 7, 25-30; Sér. 8, 1+ 1816+
 Annales de gynécologie et d'obstetrique, 57+ 1902+ M
 Annales der pharmacie, see, Liebig's annalen der chemie und der
 pharmacie.
 Annali di matematica, Sér. 3, 1-13, 1898-1907
 Annals of bee culture, 1872
 Annals of botany, 1+ 1887+ H
 Annals of British geology, 4. 1893 G
 Annals of gynecology, 1, 3-6, 1887-1892
 Annals of mathematics, 1-10, Ser. 2, 1+ 1884-96. 1899+
 Annals of otology, 15, 1906 M
 Annals of science, 1-2 1852-54
 Annals of surgery, 1+ 1885+ M
 Anneé biologique, 1+ 1895+
 Annuaire de chemie, 1849-1851
 Annual of scientific discovery, 1-16, 1850-65
 Annual of the universal medical sciences, 1888-94 M
 Archiv der mathematik und physik, Ser. 2, 17; Ser. 3, 1+ 1899+

- Archiv für anatomie und entwicklungsgeschichte, see, Archiv für anatomie und physiologie. Anatomische abtheilung.
- Archiv für anatomie und physiologie, M
 — Anatomische abtheilung, 1877+ Supp. 1889-93, 1895
 — Physiologische abtheilung,
 1877+ Supp. 1879-80, 1884-87, 1889-90, 1892-93, 1899-00,
 1902.
- Archiv für entwickelungsmechanik der organismen, 1+ 1894+ Z
- Archiv für experimentelle pathologie und pharmakologie,
 1+ 1873+ M
- Archiv für gesammte physiologie, 1+ 1903+ M
- Archiv für gynaekologie, 53+ 1870+ M
- Archiv für kinderheilkunde, 36+ 1903+ M
- Archiv für microscopische anatomie, 1+ 1865+ M
- Archiv für ophthalmologie, 1+ 1854+ M
- Archiv für pathologische anatomie und physiologie,
 1-170, 175+ 1847+ M
- Archiv für physiologie, see Archiv für anatomie und physiologie.
- Archives de biologie, 15-17, 1897-1900
- Archives de médecine expérimentale et d'anatomie pathologique,
 10, 1898 M
- Archives de physiologie normale et pathologique, 28, 1896 M
- Archives de zoologie expérimentale et générale, 38+ Z
- Archives internationales de pharmacodynamie et de therapie,
 1+ 1894+ M
- Archives internationales de physiologie, 1+ M
- Archives Italiennes de biologie, 1+ 1882+ M
- Archives of neurology, 1-2. 1901-2 M
- Archives of ophthalmology, 1+ 1869+ M
- Archives of otology, 8+ 1879+ M
- Archives of pediatrics, 1-9, 13, 1884-96
- Archives vétérinaires, 1-9||, 1876-84|| V
- Archivio di fisiologia, 1+ 1904+ M
- Arkansas. Geological survey. Report,
 1888¹⁻⁴, 1889², 1890¹⁻³, 1890⁴¹⁻², 1891¹⁻², 1892¹⁻², 1892⁵¹⁻²
- Arkiv för botanik, 7+ 1908+
- Arkiv för matematik astronomi och fysik 1+ 1903+ Obs.
- Arkiv för zoologie, 4+ 1908+

- Association of American medical colleges. Transactions, 1900 M
 Association of American physicians. Transactions, 18+ 1903+ M
 Astronomical journal, 1+ 1849+ Obs.
 Astronomical society of the Pacific. Publications,
 11⁷¹, 12⁷², 17¹⁰³, 10⁵, 18+ Obs.
 Astronomie, 8, 10, 11, 1889-92. Obs.
 Astronomische abhandlungen, 1+
 Astronomische gesellschaft. Katalog. Erste abteilung,
 1, 3-15 Obs.
 ——— Zweite abteilung, 1, 2
 ——— Publikationen, 1+ Obs.
 ——— Vierteljahrsschrift, 1-32, 1866-97 Obs.
 Astron. Nachrichten, 100+ 1881+ Obs.
 Astronomy and astro-physics,
 11-13||, 1891-94||. (Cont. as Astrophysical journal.) Obs.
 Astrophysical journal,
 1+ 1895+ (Cont. of Astronomy and astrophysics.) Obs.
 Athens. Observatoire national. Annales, 1+ 1895+
 Australasian association for the advancement of science. Report,
 1-5, 7-8, 10. 1889-1905
 Bacteriological world, 1|| 1891|| M
 Baltimore. Health department. Report, 1882, 1887-88
 Bee-keepers review, 9-14, 17-19+ 1896+ H
 Beiträge zur chemischen physiologie und pathologie, 1+ 1901+ M
 Beiträge zur geburtshilfe und gynaekologie, 1+ 1898+ M
 Beiträge zur pathologischen anatomie, 1+ 1886+ M
 Bericht über die fortschritte der anatomie und physiologie,
 1-15||, 1856-71|| (Contin. as Jahresberichte über die fort-
 schritte der anatomie und physiologie.) M.
 Berichte über d. verhandlungen... Leipzig, see Königlich saechsische
 gesellschaft der wissenschaften.
 Berlin. Königliche sternwarte. Beobachtungen ergebnisse,
 1-11 Obs.
 Berliner astronomisches jahrbuch, 1888, 1890-99, 1901+
 Berliner klinische wochenschrift, 1+ 1864+ M
 Berliner thierärztliche wochenschrift, 1-3, 5-18. 1885+ M
 Besançon. Université. Observatoire astronomique. Bulletin as-
 tronomique, 1+ 1886+ Obs.

- Chronometrique, 3-5, 7-13, 15+ 1891+
- Météorologique, 1-14, 16+ 1890+
- Bibliographia Linnaeana rec. Hulth, 1+ 1907+
- Bibliographia medica, 1-3|| 1900-2|| M
- Bio-chemical journal, 1+ 1906+
- Bio-chemische zeitschrift, 1+ 1906+ M
- Bio-chemisches centralblatt, 1+ 1903+
- Bio-physikalisches centralblatt, 1+ M
- Biological bulletin of the marine biological laboratory,
1+ 1899+ Z
- Biological society of Washington. Proceedings,
16, p. 117-18; 17, p. 115-20; 19, p. 1-2
- Biometrika, 1+ 1901+ Z
- Bonn, Sternwarte. Astronomische beobachtungen, 3-5, 8. 1861 Obs.
- Veröffentlichungen, 1+ 1895+ Obs.
- Boston. Health board. Report, 3, 11
- Boston medical and surgical journal,
14-15, 18-19, 21-24, 27, 43, 45, 50, 56-57, 75+ 1836-67 M
- Boston society of natural history. Guides for sci. teaching,
1-6, 8, 12 1888-1893
- Memoirs, 4^a, 5¹¹
- Occasional papers, 7+ 1904+
- Proceedings, 30-32. 1902-6
- Bordeaux. Observatoire astronomique. Annales, 1+ 1885+ Obs.
- Catalogue photographique, 1, 2¹⁻², Obs.
- Botanical gazette, 1-21, 25+ 1875+ H
- Botanische zeitung, 58+ 1900+ H
- Botanischer jahresbericht, see Just's botanischer jahresbericht.
- Botanisches centralblatt, 1+ 1880+ H
- Braithwaite's retrospect,
part 28-31. 44, 45, 47, 48, 54, 57-65, 70-85, 90, 91, 1854-1885 M
- Breslau. Königliche Universitäts sternwarte. Mittheilungen,
1-2. Obs.
- Brighton health congress. Transactions, 1881
- British association for the advancement of science, 1+ 1831+
- British astronomical association. Memoirs, 1-7, 1893-9 Obs.
- British medical journal, 1888-89, 1891-94, 1905-06+ M
- Bronn's klassen und ordnungen des thierreichs,
1¹⁻², 2¹, 3¹, 4^{1a}, 5¹, 6+ 1880+ Z

- Brooklyn entomological society. Bulletin, 1-7, 1878-1885 H
 — Entomologica Americana, 1-6|| 1885-90|| H
 Brooklyn Inst. of arts & sciences, Cold Spring Harbor monographs,
 1+ 1903+
 Brooklyn Inst. of arts and sciences. Museum. Memoirs of natural
 science, 1¹, 1904
 Brooklyn Inst. of arts and science. Museum. Science bulletin,
 1+ 1901+
 Brussels. Observatoire royale. Annales astronomiques,
 1-7, 9+ 1878-96. Obs.
 — Annuaire astronomique, 1905+ Obs.
 Bryn Mawr college monographs, 1+ 1901+
 Buffalo society of natural sciences. Bulletin, 2+ 1874+
 Bulletin astronomique, 8+ 1891+
 Bulletin des sciences mathématiques, 1+ 1871+
 Cairo. Abassia observatory. Report on meteorological observa-
 tions, 1898+ Obs.
 — Rains of the Nile basin, 1904+
 Cairo. Observatoire Khédivial. Résumé mensuel des observations
 météorologique, 1884-98. Obs.
 California academy of sciences. Bulletin, 2 1888
 — Proceedings,
 7¹, 1876; ser. 2, 2, 4, 5², 1889, 1893-94, 1896; ser. 3, Zoology,
 1³, 1897.
 California. University. Department of geology. Bulletin,
 1+ 1893+ G
 — Publications, entomology, 1²
 Cambridge (Eng.) observatory. Astronomical observations,
 1-23, 1829-1898. Obs.
 — Report, 1904+
 Cambridge philos. society. Proceedings, 1+ 1843+
 Canada. Department of Interior. Report of Chief Astronomer,
 1905+ Obs.
 Canada. Geological survey. Contributions to Canadian palaeon-
 tology, 11. 3-5, 2¹⁻², 3¹⁻², 4¹⁻²
 Canada. Geological survey. Report, 1+ 1885+ G
 Canadian entomologist (Entomological society of Ontario),
 1+ 1869+ H

- | | | |
|---|-----------------------------|---|
| Cape of Good Hope Royal observatory. | Annals, | 1 ¹⁻² , 2 ¹ , 3-7, 8 ² , 1896+ |
| — Results of the astronomical observations, | 1857, 1875-76. | Obs. |
| — Results of meridian observations, | | 1861-70, 1879-85, 1892, 95. Obs. |
| Carleton college. Goodsell observatory. | Publications, | 1 ¹⁻² , 2, 1890+ Obs. |
| Carnegie institute, Pittsburg. Museum. | Annals, | 1+ 1901+ |
| — Memoirs, | | 1+ 1903+ |
| — Report of director, | | 1905 |
| — Celebration of founder's day, | | 1907 |
| Carnegie institute, Washington. Publications, | | 1+ |
| — Solar observatory, Mt. Wilson. Contributions, | 1+ 1905+ | Obs. |
| Carnegie institute, Washington. Yearbook, | | 1+ 1902+ |
| Cellule (La.), | | 1+ 1884+ Z |
| Centralblatt für allgemeine pathologie und pathologische anatome, | | 11+ 1900+ M |
| Centralblatt für bakteriologie, Abt. I, | | 1+ 1887+ |
| — Abt. II, | | 1+ 1887+ H |
| Centralblatt für die medicinischen wissenschaften, | 41+ 1903+ | M |
| Centralblatt für innere medizin, | 24+ 1903+ | M |
| Centralblatt für mineralogie, geologie & palaeontologie (suppl. to Neues jahrbuch für mineralogie), | | 1901+ G |
| Centralblatt für physiologie, | 15+ 1901+ | M |
| Charkow. Universität sternwarte. Annalen, | | 1 |
| — Publikationen, | | 4-5 Obs. |
| Chemical news & journal of physical science, | 1-6 ⁴² , 59, 60, | 1860+ C |
| Chemical society of London. Journal, | 1-14, 27-90, | 1847+ C |
| Chemical society of London. Memoirs & proceedings, | | 1-3 1841-48 C |
| Chemiker zeitung, | | 26+ 1902+ |
| Chevreuse-Observatoire de météorologie, | | 5. Obs. |
| Chicago academy of sciences. Bulletin, | 1, 2 ²⁻⁴ , | 1883 |
| — Geological and natural history survey. Bulletin, | 1+ 1896+ | |
| — Special publications, | | 1, 1902 |
| Chicago. Health department, | | 1881-82, 1887, 1891 |
| Chicago pathological society. Transactions, | | 4, 1899-1901. M |

Chicago. University. Yerkes observatory. Publication,

1+ 1900+ Obs.

— Report,

1899-1900

Christiana. Universitäts stern warte. Zonenbeobachtungen,

1 & supp. Obs.

Cincinnati (O.). Health department. Annual report,

14-15, 20-21, 1880-7

Cincinnati. University. Bulletin of mathematics, 1, 1904

Cincinnati. University. Observatory. Publications, 11, 14. Obs.

College of physicians, Philadelphia. Transactions, 2, 4-6, 7-11. M

Colorado college publications. Science series, 12+ 1907+

Colorado. Board of health. Report, 4-5, 6, 8. 1892-1906

Colorado scientific society. Proceedings, 7+ 1904+

Colorado. University. Medical bulletin, 2¹, 3²+

Comptes rendus des travaux de chemie par Laurent et Gerhardt,

6. 1851. C

Columbia university. Astronomical observatory. Contributions,

1+ 1892+ Obs.

Columbia university. Biological series,

1-8, 10, 1894+

Columbia university. Contributions from the geolog. dep't,

10⁹⁰, 11⁹¹, 10⁹, 13¹¹¹, 13⁹

Congrès géologique international. Compte rendu, 1891

Congrès international de physique. Rapport, 1900

Congreso científico Latino Americano. Reunion, 2. 1901

Congress of American physicians. Transactions, 6. 1903

Congress of arts and science, 1-8||

Connecticut. Board of health. Annual report, 2+ 1879+

— Geological survey. Bulletin, 1+ 1904+

Connecticut academy of arts & sciences. Transactions,

9, 11. 1895-96

Connecticut Audubon society. Report,

2

Davenport academy of natural sciences. Proceedings, 4+ 1882+

Denison University. Bulletin of the scientific labs.,

2¹⁻², 3, 4¹⁻², 5, 6², 7, 8¹⁻², 9¹⁻², 10, 11, 12¹⁻¹¹, 13², 1886+

Detroit (Mich.). Board of health. Annual report, 1. 1882

Detroit medical journal, 7+ 1907+ M

Detroit observatory. Transactions, pt. 1, 1904. Obs.

Deutsche botanische gesellschaft. Berichte, 1-18, 20+ 1883+ H

- Deutsche entomologische zeitschrift. 1906+ H
- Deutsche mathematiker vereinigung. Jahresbericht,
1-9, 11+ 1890+
- Deutsche mechaniker-zeitung, see, Zeitschrift für instrumenten-
kunde, Beiblatt.
- Deutsche medicinische wochenschrift, 3+ 1877. M
- Deutsche pathologische gesellschaft. Verhandlungen, 6+ 1903+ M
- Deutsche zeitschrift für thier-medicin und vergleichende patholo-
gie,
1-22||. 1875-97||. (Contin. as Zeitschrift für Thiermed-
icin.) V.
- Deutsches archiv für klinisches medicin 1+ 1866+ M
- District of Columbia. Health officer. Report, 1879, 1881
- Dorpat. Kaiserliche universitäts sternwarte. Observationes,
1, 6, 8-11, 13-14, 15^a, 16+ 1839. Obs.
- Drury college. Bradley geological field station. Bulletin, 1¹
- Dublin. University. Dunsink observatory. Astronomical observa-
tions, 2, 4-9. 1882-1900. Obs.
- Dudley observatory. Albany. Annals, 1-2, 1866-71. Obs.
- Dun Echt observatory. Publications, 1-3, 1876-85. Obs.
- Dunsink observatory, see, Dublin. University. Obs.
- Eclectic repertory, 10|| 1820|| M
- École des chartes. Bibliotheque, Sér. 2, 1. 1844
- École normale superieur. Annales scientifiques,
Ser. 2, 22+ 1905+
- Economic geology. (Cont. of American geologist), 1+ 1905+ G
- Edinburgh. Royal Observatory. Annals, 1+ 1902+ Obs.
- Astronomical observations, 4-10, 14-15, 1838-1886
- Elisha Mitchell scientific society. Journal, 6+ 1886+
- Enseignement mathématique, 8+ 1906+
- Entomologica Americana, see, Brooklyn entomological society.
- Entomological news, 1+ 1890+ H
- Entomological society of Phila. Proceedings,
1-6|| 1861-7||. (Contin. as Amer. Entomol. Soc. Trans.)
- Entomological society of Washington. Proceedings, 1+ 1884+ H
- Entomologist, 29+ 1896+ H
- Entomologist's monthly magazine, 7-12, 29+ 1896+ H
- Entomologist's record & journal of variation, 7+ 1895+ H

- Ergebnisse der anatomie, see, Anatomische hefte, Abt. II
 Ergebnisse der physiologie, 1+ 1902+ M
 Essex institute. Bulletin, 1-9, 13-21⁶, 10-12, 22-30, 1869+
 Essex institute, Salem, Mass. Report, 1899, 1900
 Field museum of natural history. Publications. Anthropological
 series,
 1², 2¹⁻³, 6, 3-5, 6¹⁻², 7¹⁻², 8, 1896+
 — Botanical ser., 1-2¹⁻⁵, 3¹⁻², 1895+ H
 — Ornithological ser., 1-2¹⁻², 2⁴, 1896
 — Geolog. ser., 1³⁻¹¹, 2¹⁻⁹, 3¹⁻⁵, 1899
 — Report ser., 1³⁻⁵, 2, 3¹
 — Zoolog. ser., 1-6 (v. 2 incomplete)
 Finska vetenskaps societeten Helsingfors. Acta, 27, 1900
 Flora, 86-94, 96+ 1899+ H
 Florence. Reale osservatorio astronomico Firenze ad Arcetri. Pubb-
 licazione, 1-16, 18-24. Obs.
 Fortschritte der medicin, 18, 1900. M
 Franklin institute. Journal, 151+ 1901+
 Gazette astronomique, 1+ 1908+ Obs.
 Geological society of America. Bulletin, 1+ 1890+ G
 Geological society of London. Quarterly journal,
 1-51, 53+ 1845+ G
 Geologisches centralblatt, 8+ 1906+ G
 Georgia Geol. survey. Bulletin, 2, 3, 5-12, 1898
 Great Britain. Geological survey. Memoirs, 1, 3, 1846+
 Glasgow Philosophical society, see, Philosophical society of Glasgow.
 Goodsell observatory, see, Carleton College.
 Greenwich observatory. Astron. Obsns.,
 1836-48, 52, 56, 57, 58, 60-71. Obs.
 — Astron. results, 1902+ Obs.
 — Magn. meteorol. obsns., 1840-47. Obs.
 Grenoble. Université. Annales, 15+ 1903+
 Grönigen-Astron. Lab. Publikationen, 1-3, 5, 7+ Obs.
 Hamburg-Sternwarte. Mittheilungen, 1+ Obs.
 — Jahresberichte, 1897+
 Harvard College observatory. Annals,
 2², 5, 9-15¹, 23¹⁻², 24, 26-28¹⁻², 29, 32¹⁻²-34, 37¹⁻²-38, 41¹⁻⁹

44-46, 47¹, 48, 49¹, 51, 52¹, 53¹⁻², 55¹, 56¹⁻², 57¹, 60¹⁻²,
62¹. 1854+ Obs.

— Circulars, 1+ 1900+ Obs.

— Report, 51, 57-60, 62+ Obs.

Harvard museum of comparative zoology. Contributions,
6, 157-160, 164, 168. 1871. 1873

— Bulletin, 17^a, 48^a

— Memoirs, 9, 12-13, 1884+

Harvard university. Jefferson physical lab. Contributions,
1+ 1903+

Haynald observatorium, Kalocsa. Berichte, 1886

— Publicationen, 1+ 1886+

Heidelberg, Sternwarte. Veröffentlichungen (Astronomisches insti-
tut), 1+ 1900+

Himmel und erde, 1-14, 1889-1902. Obs.

Hongkong observatory. Observations,
1887, 1894-96, 1898, 1900-03. Obs.

Illinois. Board of health. Annual report, 2, 4, 15, 18. 1879-95

Illinois. Bureau of labor statistics. Coal report, 19+ 1900+

Illinois. Food commission. Report, 1-2, 4

Illinois. Geological survey. Bulletin, 1+ 1906+

— Geol. survey of Illinois, v. 1-8¹⁻², 1886-1890

Illinois state laboratory of natural history. Bulletin,
3, art. 13-15; 4, art. 1-5, 14; 5, art. 3, 10-12; 7, art. 4, 8-9

Index medicus, 1+ 1879+ (not pub. 1899-1902), M

Indiana academy of science. Proceedings, 1894+

Indiana. Geological & natural history. Report, 15+ 1885+

Indiana state medical society. Transactions, 52, 1901

Indianapolis. Board of health. Report, 1881-82

Insect life, 1-7|| 1888-95|| H

Institut de France. Academie des sciences. Comptes rendus heb-
domadaires de séances, 1+ 1835. Suppl. 1-2. Tab. 1-121

Institut Pasteur. Annales, 14+ 1900+

Instituto geológico de Mexico. Boletin, 20-22, 24+

— Paregones, 1+ 1903+

International clinics, Ser. 1, 2, 3, 9, 1891+ M

International medical annual, 9, 1891. M

International sanitary conference. Proceedings, 1881

- International sanitary convention of the Amer. republics. Trans-
actions, 2, 1906
- Interstate medical journal, 11-13. 1904-6 M
- Iowa academy of science. Proceedings, 1⁴, 3, 5-7, 9-12. 1893+
- Iowa. Board of health. Biennial report, 1-13
- Iowa. Geological survey. Bulletin, 1+ 1901+
- Report, 1+ 1855+
- Iowa. University. Contributions from the physical laboratory,
1+ 1907+
- Natural history laboratory. Bulletin, 4+ 1896+ Z
- Italy. Comitato geologico. Bollettino, 6⁵⁻¹², 7-8, 14, 1875+
- Jahrbuch der chemie, 1+ 1892+ D
- Jahrbuch der elektro-chemie, 7+ 1900+ C
- Jahrbuch über die fortschritte der mathematik, 1+ 1868+
- Jahrbücher für wissenschaftliche botanik, 37+ 1901+ H
- Jahresbericht über die fortschritte auf dem gebiete der geburtshilfe
und gynäkologie, 1+ 1887+ M
- Jahresbericht über die fortschritte auf dem gesamtgebiete der agri-
kultur-chemie, 1+ 1858+ D
- Jahresbericht über die fortschritte der chemie und mineralogie
(Berzelius), 1-27. 1822-1848. (Lacks 28-30.) D
- Jahresbericht über die fortschritte der physiologie, 1+ 1894+ M
- Jahresbericht über die fortschritte der physischen wissenschaften,
see Jahresbericht über die fortschritte der chemie und mineral-
ogie.
- Jahresbericht über die fortschritte in der lehr von den pathogenen
mikro-organismen, 1+ 1885+ M
- Jahresbericht über die leistungen der chemischen technologie,
11-20, 1865-74. C
- Jahresberichte über die fortschritte der anatomie und entwicklungs-
geschichte, 1+ 1892+
- Jahresberichte über die fortschritte der anatomie und physiol.,
1-20|| 1872-91||
- Jahresberichte über die fortschritte der physiologie,
1+ 1894+ M
- Jahresberichte über die fortschritte der tier-chemie,
1+ 1871+ Exp. Sta.

- Jamaica. Public gardens & plantations. Report of director,
1900-01, 1903, 1904, 1907
- Jenaische zeits. f. naturwissenschaft, 36+ 1902+ Z
- Johns Hopkins hospital. Bulletin, 1-16. 1890-1905. M
- Reports, 2-34th, 65th, 9, 10, 1891-1902. M
- Johns Hopkins University. Memoirs from the biological labora-
tory, 1-2, 1887. Z
- Jornal di sciencias mathematicas, physicas a naturals (Academia
real das sciencias, Lisbon.) 1-5, 1866-70
- Journal de mathematik, Ser. 1-3, 5-6+ 1836+
- Journal de physiologie et de pathologie générale, 1+ 1899+ M
- Journal de physique theoretique et appliquee, 1+ 1872+
- Journal des mines,
1-12, 15-29, 1793-1811. (Cont. in 1815 as Annales des
mines,), G.
- Journal f. praktische chemie,
1-108, 115-16, 131-44, 173-82. 1834+ C
- Journal f. reine und angewandte mathematik,
56-121, 127+ 1859+
- Journal für technische und ökonomische chemie,
1-18|| 1828-33|| (Cont. as Journal für praktische chemie.) C
- Journal of analytical & applied chemistry, 4-7|| 1890-93|| C
- Journal of anatomy & physiology, 21+ 1887+ M
- Journal of applied microscopy & lab. methods, 1, 5-6, 1898+ Z
- Journal of biological chemistry, 1+ 1905+
- Journal of comparative medicine and veterinary archives,
8, 10-19, 1887-98. M
- Journal of comparative neurology & psychology, 1-3, 5+ 1891+ M
- Journal of comparative pathology and therapeutics,
1-15, 1888-1902. M
- Journal of economic entomology, 1+ 1908+ H
- Journal of experimental medicine, 5+ 1900+ M
- Journal of experimental zoology, 1+ 1904+ Z
- Journal of geology, 1-3, 5+ 1893+ G
- Journal of health, 1-2, 1829-30
- Journal of hygiene, 1+ 1901+ M
- Journal of infectious diseases, 2+ 1905 M
- Journal of medical research, 9-13, 15+ 1903+ M

- Journal of microscopy and natural science (Postal microscopical soc.), 1-2, 1882-83
- Journal of morphology, 1+ 1887+ (not pub. 1902-07). Z
- Journal of mycology, 5-7, 10+ 1889+ (not pub. 1894-1901). H
- Journal of obstetrics and gynaecology of the British empire, 1-9, 11+ 1902+ M
- Journal of pathology and bacteriology, 1-11, 1892-1906. M
- Journal of physical chemistry, 6+ 1902+ C
- Journal of physiology, 1+ 1878+ M
- Just's botanischer jahresbericht, 1+ 1873+ H
- Kaiserlichen akademie der wissenschaften, Wien.
- Mathematischen naturwissenschaftliche classe. Sitzenerberichte, 110+ 1901+
- Philosoph-historische classe. Sitzenerberichte, 110+ 1901+
- Kansas. Geological survey (University of Kansas). Annual Bulletin on the mineral resources of Kansas, 1897-99
- Report, 1+ 1896+
- Kansas. State board of health. Annual report. 2-11, 13-14, 17-18. 1886-1902
- Kansas. University. Science bulletin, 1+ 1902+
- Kansas academy of science. Transactions, 8+ 1881+
- Karlsruhe. Grossherzliche sternwarte. Veroffentlichungen, 1-5, 1884-96. Obs.
- Kasan (Russia). Astron. observatoria. Contributions, 1+ 1893+ Obs.
- Observations, 1+ 1885+ (In Russian.)
- Kasan observatoire-Engelhardt. Observations astronomique d'Engelhardt, 3. Obs.
- Kiel, Sternwarte. Publikationen, 2+ 1882+ Obs.
- Astronomische beobachtungen, 1. 1905
- Knowledge, 3-9, 1883-86
- Kodalkanal observatory. Bulletin, 1+ 1904+
- and Madras observatory. Report, 1905+ Obs.
- Königlich-bayerische akademie d. wissenschaften, München.
- Mathematisch-physikalische classe, Sitzenerberichte, 31-36, 1901+
- Philosophisch-philologische u. d. historischen classe, 1901+

- Königlich-preussische akademie der wissenschaften, Berlin. Sitz-
berichte, 1902+
- Königlich-preussisches geodätisches institut, Berlin. Veröffentlich-
ungen, Neue folge, 7, 10, 15, 19, 21-24, 26, 29+ Obs.
- Königliche astronomischen rechen instituts, Berlin. Veröffentlich-
ungen, 27+ Obs.
- Koeniglich-saechsische gesellschaft der wissenschaften.
— Mathematisch-physische klasse. Berichte, 54+ 1902+
— Philologisch-historische classe. Berichte, 54+ 1902+
- Königsberg. Universität sternwarte. Beobachtungen,
37+ 1832+ Obs.
- Königstuhl-Heidelberg. Astrophysikalischen observatoriums. Pub-
likationen, 1+ 1902+ Obs.
- Kremünster sternwarte. Resultate, 1854, 1899-1900. Obs.
- Lancet (London),
1, 1823; 5, 1824-25; 1827-28¹; 1828-29; 1842-43²; 1843-44;
1879; 1880¹; 1881¹; 1882²; 1905+
- Leander McCormick observatory, see, Virginia. University.
- Leland Stanford Junior University, Hopkins seaside laboratory.
Contributions to biology, 9, 11, 13, 16, 22, 31, 1896+ Z
- Leland Stanford Junior University. Pubs. Geology & palaeontology,
1, 1895
- Studies in electricity, 1+
- Lens, 1-2|| 1872-73||
- Leyden (Holland). Sternwarte. Annalen, 1+ 1868+ Obs.
- Lick observatory (Berkeley). Bulletins, 1+ 1902+ Obs.
- Contributions, 2-5, 1891-95
- Publications, 1+ 1887+
- Liebig's Annalen der chemie und der pharmacie,
41-44, 81-125, 127, 129-44, 153-64, 173-88, 321-52. Suppl. 1-2,
5, 7-8. 1842+ C.
- London, Edinburgh & Dublin philosophical magazine,
Ser. 5, 1-2, 4-6, 8-50; ser. 6, 1+ 1876+
- London mathematical society. Proceedings, Ser. 2, 1+ 1904+
- Louisiana Agri. experiment station. Report on geology of Louis-
iana, 1-6
- Louisiana. Geological survey. Bulletin, 1-4, 1905
- Report, 1899, 1902

Louisiana. Gulf biological station. Bulletin,	1+ 1902+
Louisiana. Health board. Report,	1904-5
Lowell observatory. Annals,	1+ 1898+ Obs.
— Bulletin,	1+ Obs.
Lund. Astronomiska observatoriet. Middelände, Ser. 1,	1+ Obs.
— Observations,	1-3
Lyon. Université. Annales, n. s.,	1+ 1899+
McGill University. Papers for the dep't of botany,	1+ 1896+
— Chemistry & mineralogy,	1-2
— Geology,	1-13, 17, 21-23
— Physics,	1-11
— Physiology,	1-6
— Zoology,	1-2
Madras observatory. Meridian Circle observations,	1-9, 1862-99. Obs.
Madrid. Real observatorio. Anuario,	1-9, 12-18. 1860-80
— Observaciones meteorológicas,	1863-66, 1868, 1870-99
Madrid Real observatorio. Resumen de las observaciones meteorológicas,	1866-67, 69-70, 73, 75-96
Maharaja Takhtasingji observatory, Poona. Publications,	1. 1902. Obs.
Maine. Board of health. Annual report,	1+ 1885
Maine. Geological survey. Report,	1839
Maine. Vital statistics department. Report,	1-2, 4, 6-9, 12. 1892+
Manchester geological society. Transactions,	11-28 ¹ . 1874-75
Manchester literary & philosophical society. Memoirs & proceedings,	45+ 1900+
Markree, Catalogue of stars,	1-4, 1851-6. Obs.
Maryland. Geological survey,	1+ 1897+ G
Massachusetts. Board of health. Annual report,	1-14, 16-21, 25-31, 33+ 1869+
Mathematische annalen,	1-60, 63+ 1869+
Medical and surgical reporter,	18-30, 32-52, 1868-1885 M
Medical news,	18-20, 26-36, 39, 40-48, 51-52, 54-57, 61, 73, 84. M
Medical record,	2, 3, 6, 9-16. 1867+ M
Medical review of reviews,	7-8. 1901-2 M

Medico-chirurgical review, n. s.	19, 1833. M
Melbourne (Australia) observatory. Results of astronomical observations,	2-7, 1866-84. Obs.
Michigan. Geological survey. Annual report,	1901, 1903+
Michigan. Geological survey,	3, 5-9, 1873-1904
Michigan. Board of health. Annual report,	1-3, 5+ 1873+
Michigan. Vital statistics dept. Report,	6-8, 10, 32. 1872+
Michigan academy of science. Bulletin,	1+ 1904+
Michigan academy of science. Report,	1+ 1900+
Michigan state medical society. Transactions,	9-10, 12-13, 15-23, 25. M
Microscope,	9-12, 1889-92
Microscopical bulletin & science news,	1-10, 1884-93
Milan. Reale osservatorio di Brera. Pubblicazioni,	38-42. Obs.
Minneapolis. Health board. Report,	1887-38
Minnesota. Geological and natural history survey.	
— Annual report,	1-24, 1872-98 H
— Bulletin,	1-5, 7-10, 1887-1894
— Minnesota botanical studies,	1+ 1894+
— Reports, Botanical series,	1+ 1892+
— Final report,	1-6, 1872-1901
Minnesota. Geological survey. Minnesota botanical studies,	1+ 1894+
— Reports, Botanical series,	1+ 1892+
Minnesota, Health & vital statistics Board. Report,	5-6, 1894-7
Minnesota academy of natural sciences,	41 ²
Missouri. Bureau of geology & mines. Biennial report, 1893-7, 1903	
Missouri. Entomologist report on the noxious insects of Missouri,	1-8, 1868-77
Missouri. Geological survey. Bulletin,	1-5, 1890+
— Report,	1853-74; also 1-13. 1891-1900
— Report,	ser. 2, 1+ 1903+
Missouri. University of Missouri studies,	1+ 1905+ M
Missouri state medical association. Journal,	1+ 1904+ M
— Transactions,	36, 39-40, 45-46 1893-1903 M
Missouri botanical garden. Report,	1+ 1890+
Monatsschrift für geburtshülfe und gynaekologie,	1-16, 19+ 1895+
Montana Agr. Coll. Science studies. Botany,	11 ² , 1905

- Montana. University. Bulletin: Biological series, 1+ 1901+
 — Geological series, 1+ 1894+
 Monthly microscopical journal,
 1-18|| 1869-77|| (Cont. as Royal microscopical society jour-
 nal.) Z
- Morphologische arbeiten, 1-8|| 1892-8|| M
- Morrison observatory, Glasgow, Mo. Publications, 1, 1887. Obs.
- Münchener medicinische wochenschrift, 1+ 1854+ M
- Munich K. Sternwarte. Neue annalen der K. sternwarte in Bogen-
 hausen, 1. Obs.
- Musée d'histoire naturelle, Paris. Archives, 5
- Museu Goeldi de historia natural e ethnographia. Boletim,
 4+ 1905+
 — Memorias, 4+ 1905+
- Nashville (Tenn.). Board of health. Report, 2. 1877
- National academy of sciences. Biographical memoirs,
 2-5, 1886-1904
- National academy of sciences. Memoirs, 1-3, 4¹⁻², 5-7, 8¹⁻⁷, 9, 1866+
 — Report, 1903-04
- National institution for the promotion of science. Bulletin of pro-
 ceedings, 1¹, 1840-41
- National physical laboratory (England). Report, 1901-03. Obs.
- National quarantine and sanitary convention. Proceedings, v. 3
- Naturforschende gesellschaft. Basel. Verhandlungen, 13+ 1901+
 Naturwissenschaftliche rundschau, 1-12, 1886-97
- Natural science, 1-15|| 1892-99||
- Nature, 1+ 1870+
- Nautical almanac & astronomical ephemeris, 1884-86. Obs.
- Nebraska. Fish commission. Report, 11-12, 1889-1891
- Nebraska. Geological survey. Report, 1, 1902
- Nebraska. University. Studies from zoological laboratory,
 3. 1904. Z
- Neues jahrbuch für mineralogie, 1900+ G
- Repertorium, 1895+ G
- Beilage, 9+ 1901+ G
- Nevada. Surveyor-general, 1895+
- New Hampshire. Board of health. Annual report, 1. 1882

- New Hampshire, Vital statistics department. Report, registration, 17. 1900
- New Jersey. Board of health. Report, 27-30
- New Jersey. Geological survey. Final report, 1-6, 1888-1904
- Annual report, 1883+
- New South Wales. Botanic gardens. Annual report, 1904
- Department of mines, Geol. survey, Memoirs: Palaeontology, 5, 1892
- New York (city). Board of health. Annual report, 1871-72, 1874-80, 1892-1905
- N. Y. State board of health. Annual report, 1-5, 8-24, 1880-1904
- N. Y. State botanist. Report, 1867-1902 H
- N. Y. (state) entomologist. Report, 1-11, 1881-1895
- N. Y. State geologist. Report, 5, 6, 8, 10-23, 1886+
- N. Y. State museum. Bulletin, 60, 65, 68, 69, 71-97, 99-104, 1887+
- Entomological bulletin, 1-23, 1888-1905. H
- Museum report, 4, 6-8, 12-70, 72, 74, 76, 77, 79-80. 1850+
- N. Y. Weather bureau. Report, 7-10, 1895-98
- N. Y. University. Bulletin of medical sciences, 1-2, 1901+
- N. Y. botanical garden. Bulletin, Nos. 4, 6, 8-17 (vols. 1, 2, 3, 4-5 incomplete)
- N. Y. entomological society. Journal, 1-2, 5-12, 1893+ H
- N. Y. journal of medicine and surgery, 1-4, 1839-41. M
- N. Y. journal of medicine and the collateral sciences, 6, 10; ser. 3, 4-5, 1846-58. M
- N. Y. mathematical society. Bulletin, 1-3, 1891-4. (Cont. as. Am. Math. society. Bulletin.)
- N. Y. medical abstract, 2-4. 1882-4. M
- N. Y. medical journal, 1-72, 78+ 1865+ M
- N. Y. state medical society. Transactions, 1807-31, 1838-43, 1856, 1858, 1860-61, 1863-66, 1868-72, 1877-78, 1883-84, 1886, 1892, 1895, 1898. M.
- New Zealand institute. Transactions & proceedings, 36+ 1904+
- Nice. Observatoire. Annales, 1-10, 1887-1905. Obs.
- Nicholas. Observatoire central, see, Pulkova.
- Norsk Gradmaalingskommission. Publication, 5-7, 1887-90. (1 pt. without no. 1895.) Obs.
- Udgivet, 4-6, 1887-1904

- North Carolina. Board of health. Report, 9-11, 1901-6
- North Carolina. Geological survey. Bulletin, 1-2, 5-14, 17+ 1893+
- Economic papers, 1, 3, 4, 6-9, 11+ 1897+
- Report, 1+ 1905+
- Nova Scotian institute of natural science. Proceedings, 3¹⁻⁴, 4¹, 7², 1874-87
- Oberlin college laboratory. Bulletin, 7, 10, 12
- Observatory, 6+ 1883+ Obs.
- Oesterreichische botanische zeitschrift, 21, 1871. H
- Ó-Gyalla astrophysikalisches observatorium, Beobachtungen, 1-21. 1879-99. Obs.
- Kleinere veröfentlichungen, 1-9
- Ohio. Board of health. Annual report, 1-4, 6-8, 11-14, 16-18. 1886-1903
- Ohio. Dairy and food commissioner. Report, 1-16, 1886-1901. Exp. Sta.
- Ohio. Geological survey. Bulletin, ser. 4, 1-6. 1903+
- Report, 1, 7, 1873, 1893
- Report of progress, 1869-70
- Ohio. Meteorological bureau. Report, 1892
- Ohio academy of science, 4²+ 1907+
- Ontario (Can.). Board of health. Annual report, 1882-1884, 1889-1892
- Ophthalmic year-book, 1903. M
- Oxford. University. Observatory. Astrographic catalogue, 1-4. Obs.
- Report Savilian Professor of astronomy to the visitors of the University observatory, 30-31. Obs.
- Miscellaneous papers, 103, 105-121
- Pan-American medical congress. Transactions, 1-2, 1892-93
- Paris. Bureau des longitudes. Annuaire, 1893. Obs.
- Paris. Observatoire. Annales, 1-24. 1855-1904. Obs.
- Catalogue photographique, 1-2. 1902+ Obs.
- Rapport annuel, 1904+ Obs.
- Paris observatoire d'astronomie physique. Annales, 2, 3¹⁻²
- Pathological society of London. Transactions, 1+ 1846+ M
- Pathological society of Philadelphia. Transactions, 14, 1891

- Pennsylvania. Geological survey. Annual report,
1886. v. 2, pts. 4, 4a
- Second report, AA, pt. 1-5, Da, F, F³, N, Pa, T¹⁻⁴, Ta, G
- Pennsylvania. State board of health. Annual report,
11, 13-14, 18. 1895-1902
- Pennsylvania. University. Contributions from botanical labora-
tory, 2¹, 1898
- Zoological laboratory, 1², 8, 10, 10, 11², 12. 1895+
- Pennsylvania. University. Publications, ser. in astronomy,
1²⁻³, 2, 3¹. Obs.
- Philadelphia. Health officers. Annual report, 1880-81, 1885-86
- Philadelphia commercial museum. Scientific department. Bulle-
tin, 1. 1899
- Philadelphia county medical society. Proceedings, 2-4, 6, 8-19. M
- Philadelphia medical times, 1-7. 1870-77. M
- Philippine Islands. Bureau of government laboratories. Publica-
tions, 1-36|| 1902-05|| (Cont. in Philippine journal of science.)
- Superintendent's report, 1903-04
- Philippine Islands. Weather bureau. Director report,
1902²⁻³, 1903
- Philippine journal of science, 1+ 1906+
- Philosophical society of Glasgow. Proceedings, 6+ 1865+
- Philosophical society of Washington. Bulletin, 1-11. 1874-1891
- Photogram, 1906+ H
- Physical review, 1+ 1893+
- Physical society of London. Proceedings, 1+ 1874+
- Physician and surgeon, 3-8, 20. M
- Physikalische zeitschrift, 1+ 1899+
- Popular astronomy, 1+ 1894+
- Popular science monthly, 1+ 1872+
- Postal microscopical society, Journal, see Journal of microscopy and
natural science.
- Potsdam. Astrophysikalisches observatorium. Publikationen,
1-14, 16-17, 1879+ Obs.
- Photographische himmelskarte, 1-3. 1899-1903. Obs.
- Prague (Bohemia) K. K. sternwarte. Astronomische beobachtun-
gen, 1884+ Obs.

- Presbyterian hospital, N. Y. Medical and surgical report,
1-3, 5+ 1896+ M
- Psyche (Cambridge entomological club), 1+ 1874+ H
- Pulkova. Nikolalefskaia Glavnaia observatoria. Observations,
1-14, ser. 2, 1-3, 5-6, 8-9¹⁻⁴, 10-14, 16¹, 17¹⁻², 18¹⁻², 1869+ Obs.
- Pulkova. Nikolaihauptsternwarte. Mittheilungen 1+ Obs.
- Quarterly epitome of Am. practical medicine & surgery,
parts 1-20, 1881-84
- Quar. journal of microscopical science, 43+ 1900+ Z
- Quarterly journal of pure and applied mathematics, 35+ 1904+
- Reale accademia dei Lincei. Rendiconti, 12+ 1903+
- Reale accademia delle scienze dell' Istituto di Bologna. Memorie,
1+ 1908+
- Reale istituto di studi superiori pratici... Florence. Osservatorio
astronomico in Arcetri. Pubblicazioni, 1+ 1896+
- Reale istituto Veneto di scienze lettere & arte. Atti, 62+ 1902+
- Memorie, 27+ 1907+
- Regia societas scientia, Upsala. Nova acta, 1¹⁻³, ser. 4, 1²
- See, also, Bibliographia Linnaeana.
- Rennes. Université. Travaux scientifiques, 1+ 1901+
- Repertorium der analytische chemie, 1-7|| 1881-87||
- Repertorium der physik, 1-27|| 1866-1891||
- Repertorium für physikalische technik, see Repertorium der physik.
- Revista científica, Havana, see Academia de ciencias médicas, físicas y naturales, Annales.
- Revista di patologia vegetale, 1¹, 3, 5, 7, 9-10, 1907+
- Revue générale de botanique, 14+ 1902+ H
- Revue générale des sciences pures et appliqués, 16+ 1905+
- Revue scientifique, ser. 5, 3+ 1905+
- Revue semestrielle des publications mathématiques, 1+ 1893+
- Rhode Island. Board of health. Report, 21-24, 50. 1898-1901
- Rhodora, 7⁷³⁻⁷⁴, 8⁸⁵
- Rochester academy of science. Proceedings, 1+ 1891+
- Rome. Reale osservatorio del collegio Romano. Memorie,
Ser. III, 1-4¹⁻². Obs.
- Vatican observatory. Catalogo fotografico stellare, 1. Obs.
- Royal astronomical society. Memoirs, 1-57, 1822-1903
- Monthly notices, 19-27, 51+ 1858+ Obs.

- Royal geological society of Cornwall. Transactions,
1-2, 4-5, 1814-43
- Royal Irish academy, Dublin. Transactions, 2, 26¹⁰
- Royal microscopical society. Journal, 1+ 1878+ Z
- Royal society of Canada. Proceedings & transactions,
Ser. 1, 9-12; ser. 2, 1+ 1892+
- Royal society of London. Philosophical transactions,
150-177, A, 178-192, 194+ B, 194+ 1860+
- Proceedings, 7+ 1854+
- Royal society of Victoria. Proceedings, n. s., 16+ 1903+
- St. Louis (Mo.) Health department. Annual report,
1884, 1888, 1893-95
- St. Louis medical review, 50, 55+ 1904+ M
- San Francisco. Board of health. Annual report, 1898
- Sanitarian, 28-33, 46-52. 1892-1904
- Schweizerische-naturforschende gesellschaft in Winterthur. Ver-
handlungen, 83-87, 1900-1903
- Science, 1-14, 19-22, 1883-1893; n. s. 1, 3+ 1895+
- Science abstracts, 1+ 1903+
- Science gossip, n. s., 2-8, 1896-1901
- Science progress, London, 1+ 1906+
- Scientiae baccalaureus, 1|| 1890||
- Scientific American, 66+ 1892+
- Supplement, 33+ 1892+
- Sidereal messenger,
1-10|| 1883-92|| (Cont. as Astronomy and astrophysics.) Obs.
- Skandinavisches archiv für physiologie, 1+ 1889+ M
- Smithsonian institution. Astrophysical observatory. Annals,
1+ 1900+ Obs.
- Contributions to knowledge,
1+ 1847+ (v. 3 l. 22, 37; 5 l. 45; 21 l. 387-8; 26 l. 647).
- Report, 1, 5-6, 8+ 1847+
- Smithsonian miscellaneous collections,
1+ 1862+ (v. 1 l. 31, 153; 2 l. 163, 176; 6 l. 171; 7 l. 183; 8 l.
137, 168, 178; 10 l. 231; 11 l. 265; 12 l. 263; 34 l. aëë).
- Sociedad científica. Antonio Alzate, Mexico. Memorias y revista,
13⁷⁻¹⁰, 18⁰⁻⁸, 19⁸⁻¹², 20⁵⁻¹², 21-24, 25¹⁻³, 26¹⁻³

- Societas pro fauna & fora fennica acta, 27^s
 Societas scientiarum naturalen croatica, 16-19
 Societas scientiarum Fennica, see, Finska vetenskaps societeten.
 Société astronomique de France. Bulletin, 10+ 1896+ Obs.
 Société entomologique de France. Annales, 1906+ H
 Société d'histoire naturelle, Toulouse. Bulletin, 7-10. 1872-76
 Société helvétique des sciences naturelles in Winterthur, see,
 Schweizerische naturforschende gesellschaft.
 Société helvétique des sciences naturelles. Geneva. Comptes rendu
 des travaux, 82, 84-86, 1900-1903
 Société impériale des naturalistes, Moscow. Bulletin,
 61-62; n. s. 1-17, 1885+
 —Nouveau mémoires, 16, 1898-1902
 Société royale malacologique de Belgique. Procès-verbeaux des
 séances, 12
 Society of Chemical industry. Journal, 1-22, 24-25, 1882+ C
 South Carolina. Board of health. Annual report,
 15, 18-25, 1894-1900
 South Dakota School of mines. Bulletin, 3-4, 6
 Stern ephemeriden zur bestimmung von zeit und asimuth, Döllin,
 1899-91. Obs.
 Stockholm. Observatoriet. Astronomiska iakttagelser,
 1+ 1876+ Obs.
 Stonyhurst College obs. Results of meteorological & magnetical
 observations, 1902+ Obs.
 Strassburg K. Universitäts, sternwarte. Annalen,
 1-2, 1896-99. Obs.
 Tachkent. Observatoire astronomique et physique. Publications,
 1-5; 1899-1901. Obs.
 Tacubaya (Mexico). Observatorio astronomico nacional. Anuario,
 1+ 1881
 — Bolétin, 1¹⁻⁷, 1890
 Tebbutt's observatory (New S. Wales). Report,
 1890-98, 1900-1903. Obs.
 Tennessee. Geological survey. Report, 1, 1855
 Tennessee. Board of health. Report, 1880-84
 Texas. University. Bulletin, Science series, 5-11
 Texas academy of sciences. Transactions, 1^s, 2-7, 1892-1905
 Texas state medical association. Transactions, 17, 32-35. M

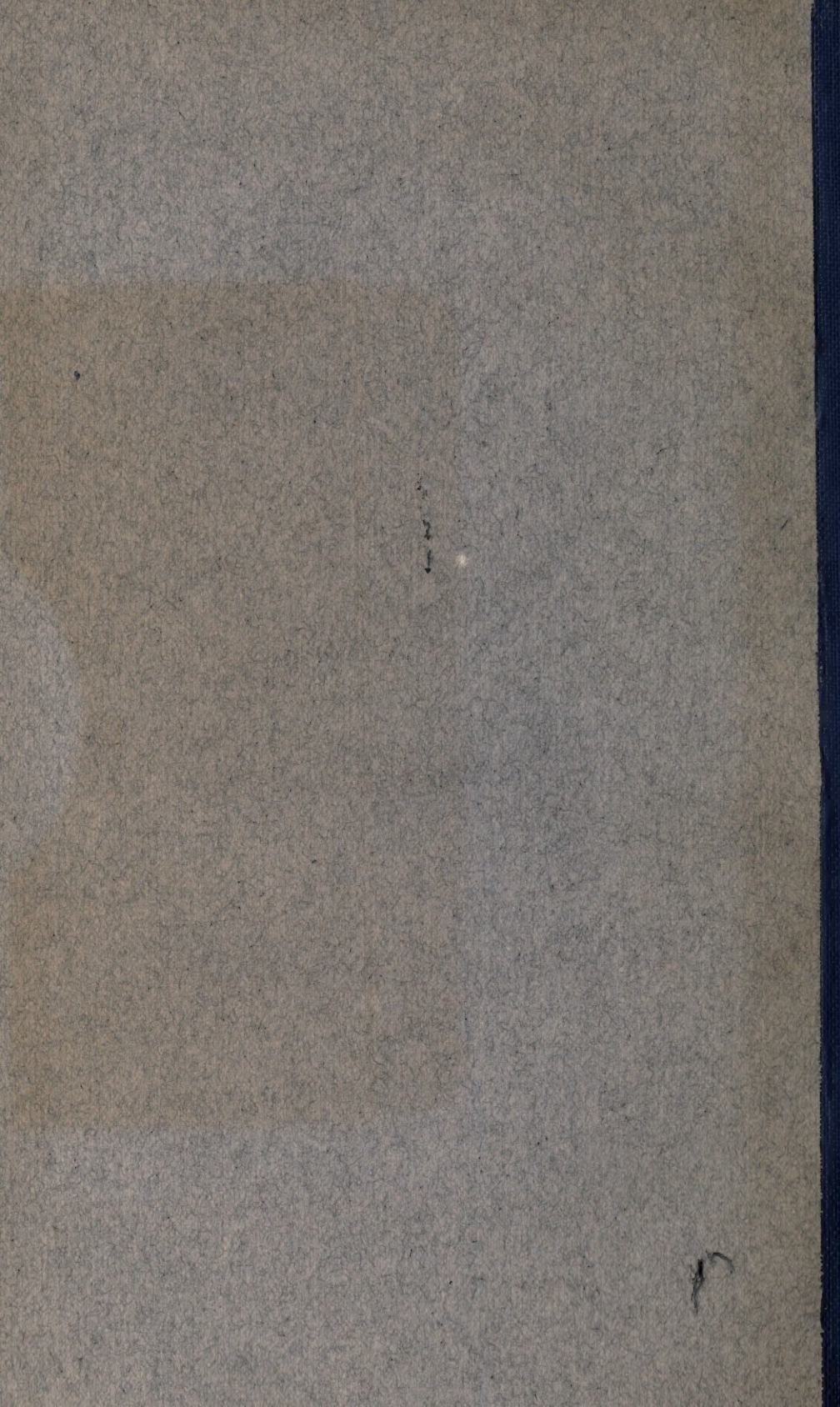
Therapeutic gazette, n. s.,	5, 1884; 3d ser., 1-9, 1885-1893
Tijdschrift over plantenziekten, Ghent,	10-11
Tokio. Observatoire. Annales,	1 ¹⁻³ , 2 ¹ , 3 ²⁻⁴ . Obs.
Toronto. University. Studies. Anatomical ser.,	1+ 1900+
— Biological ser.,	1-5, 7, 1898+
— Chemical lab. papers,	40-54, 56-60, 62-65
— Geological ser.,	1-4, 1898+
— Physical sci. ser.,	1, 3-4, 1903+
— Physiol. ser.,	1+ 1900+
Torrey botanical club. Bulletin,	1-6, 10-17, 19-29, 31-32+ 1870+ H
— Memoirs,	7, 1899
Torrey,	1 ² , 1901
Toulouse. Observatoire astronomique. Annales,	1-5, 7, 1880+ Obs.
— Catalogue photographique,	2 ¹ , 4 ¹ , 6 ¹ , 7 ¹ , ²
U. S. Agr. dept. Biological survey. Bulletin,	1-4, 11-20, 1889+ Ag.
— Biological survey. North Amer. fauna,	1-8, 11-24. 1896. Exp. Sta.
— Entomology division. Bulletin, o. s., 1-32; n. s., 1-54, 1884-01 H	
— Entomological com'n. Report,	1-5 1878-87 H
U. S. Agr. dept. Weather bureau. Bulletin,	1-12, 14-19, 21-29, 33, 35, 36
— Bulletin,	A, C, E-H, L, Q, 1897-1906
— Monthly weather review,	31+
— Publications,	3-29, 33, 36
— Report,	1891-94, 1896-1905
U. S. Board of health. Report,	1882-83
United States. Bureau of standards. Bulletin,	1+ 1904+
U. S. Coast & Geodetic survey. Atlantic coast pilot,	4-8. 1899-1902
— Bulletin,	1-40. 1888+
— Pacific coast pilot,	1879
— Special publications,	1-7, 1898-1901
— Tide tables,	1900-02
U. S. Fish & Fisheries, Com'n. Bulletin,	1-22, 1881-1902. Z & G.
U. S. Fisheries bureau. Report,	1-28, 1871-1902. Z & G
U. S. Geological survey. Bulletin,	1-46, 48-147, 149-260, 262+ G
— Mineral resources of the U. S.,	1882-93, 1900, 1904-05

U. S. Geological survey. Monographs,	1+ 1882+ G
— Atlas,	2a, 3a, 12a, 20a, 45a
— Professional papers,	1+ 1892+ G
— Report,	1+ G
— Water supply & irrigation papers,	1-79, 81+
— Hygienic laboratory. Bulletins,	1+ 1900+
— Life saving service. Annual report,	1876, 1878, 1880+
— Light-house Board. Report,	1873-80, 1882-91, 1898-1904
U. S. Medical and surgical journal,	1-3, 1866-7 M
U. S. National herbarium. Contributions,	17 ⁻⁸ , 2-8, 10 ¹⁻³ , 11 ¹⁻⁴
U. S. National museum. Bulletin,	1+ 1875+
— Proceedings,	1+ 1878+
— Report,	1884+
— Special bulletin,	2, 4 ¹⁻² , 1895-1905
U. S. Nautical Almanac office. Amer. Ephemeris & Nautical almanac,	1866-71, 1873-87, 1880+
— Astronomical papers of the American Ephemeris,	1-8. 1895+ Obs.
— Pacific coaster nautical almanac,	1898, 1900, 1902
U. S. Naval observatory. Astronomical & meteorological observations,	3, 5, 6, 8, 10-38, 1847-92. n. s. 1+
— Report,	1891-94, 1897+
— Report of board of visitors,	1899
U. S. Public health and marine hospital service. Annual report,	1875-77, 1884, 1888-89, 1892+
U. S. Public health and marine service. Public health reports,	12, 14+ 1898+
— Transactions annual conference of state & territorial health officers,	1-4. 1903-6
U. S. Signal service. Professional papers,	4, 7-8, 11-13, 15-16, 1879-84
— Report,	1872, 1875-89, 1891
Vassar College observatory. Publications,	1, Obs.
Vermont. Board of health. Report,	15. 1905-6
Veterinarian,	1-72. 1828-1899
Vienna K. K. Universitäts-sterne-warte. Annalen,	15, 18. Obs.
Virginia. Geological survey. Bulletin,	1+ 1905+

Virginia. University. Leander McCormick observatory,	1-2 ¹ . Obs.
Warsaw. Observatoire. Observations,	1-3, 1892-1902. Obs.
Washington. Geological survey. Annual report,	1+ 1901+
Washington academy of sciences. Proceedings,	1+ 1899+
Washington university. Medical department. Quarterly bulletin,	2+ 1903+
Washburn observatory. Publications,	1-11. 1882-1902. Obs.
Wellcome chemical research labs. London,	1, 4-56, 62-69
Wellcome research laboratories. Khartoum. Reports,	1+ 1904+
West Hendon House observatory, Sunderland, Eng. Publications,	1-3. 1891-1905. Obs.
Wilson bulletin (Wilson Ornithological club),	8-11, 13-16, 20-29, 54-60
Wisconsin. Board of health. Report,	1-20
Wisconsin. Dairy & food commissioner. Report,	1891-1900
Wisconsin. Geological survey. Final report,	1-3, 1873-79
Wisconsin. Geological & natural history survey. Bulletin,	1+ 1898+
Wisconsin. University. Bulletin, science series,	1+ 1894+
Wisconsin academy of sciences, arts, & letters. Transactions,	1+ 1870+
Wyoming University. School of mines. Bulletin: Petroleum ser.,	1
Yale university. Observatory. Report,	1880-81, 1893-98. Obs.
— Transactions,	1+ 1887+
Year book of facts,	1853
Year book of the scientific and learned societies of Great Britain and Ireland,	24+ 1907+
Yerkes observatory, see Chicago University.	
Zeitschrift für allgemeine physiologie,	1+ 1902+ M
Zeitschrift für analytische chemie,	1+ 1862+
Zeitschrift für anatomie und entwicklungsgeschichte,	1-2 1875-77 M
Zeitschrift für angewandte chemie,	1+ 1888+
Zeitschrift für angewandte mikroskopie,	1-9, 1895-1904. Z
Zeitschrift für biologie,	1+ 1865+
Zeitschrift für elektrochemie,	8+ 1902+ C
Zeitschrift für fleisch-und milchhygiene,	10+ 1899+

Zeitschrift für geburtshülfe und gynäkologie,	1+ 1877+ M
Zeitschrift für hygiene und infectionskrankheiten,	1+ 1886+ M
Zeitschrift für instrumentenkunde,	22+ 1902+
—— Beiblatt,	22+ 1902+
Zeitschrift für klinische medicin,	1+ 1880+ M
Zeitschrift für krystallographie,	1-20, 1879-92
—— Register,	1-20
Zeitschrift für pflanzenkrankheiten,	10+ 1900+ H
Zeitschrift für physikalische chemie,	1-45, 1887+ C
Zeitschrift für physiologische chemie,	1+ 1877+ M
Zeitschrift für schulgesundheitspflege,	17+ 1904+
Zeitschrift für thiermedicin,	
1+ 1897+ (Contin. of Deutsche Zeitschrift für Thiermedi-	
cin.)	
Zeitschrift für untersuchung der nahrungs & genussmittel,	
	1+ 1898+ C
Zeitschrift für wissenschaftliche microscopie,	1-3, 16-23+ 1884+
Zeitschrift für wissenschaftliche zoologie,	67+ 1900+ Z
Zoological record,	1+ 1864+ Z
Zoologische jahrbucher: Abt. für anatomie & ontogonie,	
	13+ 1899+ Z
—— Supplement,	4+ 1898+ Z
Zoologische station zu Neapel. Mittheilungen,	14+ 1901+ Z
Zoologischer anzeiger,	19+ 1896+ Z
Zoologischer jahresbericht,	1897+ Z
Zoologisches institut. Graz. Arbeiten,	6 ^s , 7 ¹⁻⁴ , 8 ¹⁻²
Zurich, Sternwarte des eidgenossischenpolytechnikums astrono-	
mische. Mittheilungen,	41-80, 81-95, 97, 98. Obs.
—— Publikationen,	1-3. Obs.





Z
1009
M67
no.1

Missouri. University
Library series

PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY

